

GenCore version 5.1.6  
Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 31, 2003, 02:39:38 : Search time 54.0573 Seconds  
(without alignments)  
5976.847 Million cell updates/sec

Title: US-09-550-163-1

Perfect score: 732  
Sequence: 1 caaatccagaagaatccgc.....atgaataaagccaattt 732

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:\*

- 1: /cgn2\_6/ptodata/2/ina/5A\_COMB.seq:\*
- 2: /cgn2\_6/ptodata/2/ina/5B\_COMB.seq:\*
- 3: /cgn2\_6/ptodata/2/ina/6A\_COMB.seq:\*
- 4: /cgn2\_6/ptodata/2/ina/6B\_COMB.seq:\*
- 5: /cgn2\_6/ptodata/2/ina/PTUS\_COMB.seq:\*
- 6: /cgn2\_6/ptodata/2/ina/backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	53.2	7.3	398 1	US-08-118-101A-5
2	53.2	7.3	436 4	US-09-679-185-1
3	53.2	7.3	1703 3	US-09-135-021-77
4	53.2	7.3	1703 3	US-09-135-020-3
5	53.2	7.3	1703 3	US-09-135-010A-3
6	53.2	7.3	1703 4	US-09-444-871-3
7	53.2	7.3	1703 4	US-09-597-735-3
8	53.2	7.3	1703 4	US-09-444-295-3
9	53.2	7.3	1703 4	US-09-597-732-3
10	53.2	7.3	1703 4	US-09-597-731-3
11	51.6	7.0	436 4	US-09-679-185-3
12	36.6	5.0	2652 1	US-08-318-831-1
13	36.6	4.9	7218 1	US-08-232-463-14
14	36.6	4.9	1335 4	US-09-016-434-1360
15	36.6	4.9	1380 1	US-08-110-286A-1
16	36.6	4.9	1495 4	US-08-482-746-1
17	36.6	4.9	1495 4	US-08-580-734-1
18	36.6	4.9	1495 4	US-08-374-009-1
19	36.6	4.9	1582 4	US-08-482-746-14
20	36.6	4.9	1582 4	US-09-580-734-14
21	36.6	4.9	1582 4	US-08-374-009-14
22	33.6	4.6	645 4	US-09-069-896-2
23	33.6	4.6	645 4	US-09-471-468-2
24	33.6	4.6	4104 4	US-09-996-243-277
25	33.6	4.5	606 3	US-09-328-111-133
26	33.6	4.5	2912 4	US-09-307-143-3
27	32.6	4.5	2912 4	US-09-313-294A-7566

C 28	32.4	4.4	837 3	US-08-998-416-303	Sequence 303, App
C 29	32.4	4.4	4659 4	US-09-221-017B-823	Sequence 823, App
C 30	32.2	4.4	771 4	US-09-107-532A-554	Sequence 554, App
C 31	32.2	4.4	43676 3	US-09-356-952-12	Sequence 12, App
C 32	32	4.4	246240 2	US-08-724-394A-20	Sequence 20, App
C 33	32	4.4	246240 2	US-08-724-394A-21	Sequence 21, App
C 34	32	4.4	246240 2	US-08-724-394A-22	Sequence 22, App
C 35	32	4.4	1830121 4	US-09-557-884-1	Sequence 1, App
C 36	32	4.4	1830121 4	US-09-643-990A-1	Sequence 1, App
C 37	31.6	4.3	164976 4	US-08-916-421B-1	Sequence 1, App
C 38	31.4	4.3	566 4	US-09-221-017B-919	Sequence 919, App
C 39	31.2	4.3	2450 4	US-09-620-312D-336	Sequence 336, App
C 40	31.2	4.3	2513 4	US-09-620-312D-337	Sequence 337, App
C 41	31	4.2	2049 4	US-09-252-991A-6426	Sequence 6426, App
C 42	30.8	4.2	7489 4	US-09-674-677-5	Sequence 5, App
C 43	30.6	4.2	744 3	US-08-969-644-17	Sequence 17, App
C 44	30.6	4.2	744 3	US-08-444-189-17	Sequence 17, App
C 45	30.6	4.2	744 3	US-08-468-544-17	Sequence 17, App

## ALIGNMENTS

RESULT 1  
US-08-118-101A-5  
Sequence 5, Application US/08118101A  
Patent No. 5620892  
GENERAL INFORMATION:  
APPLICANT: Kurtz, Stephen E.  
APPLICANT: Knickerbocker, Aron M.  
APPLICANT: McCullough, John R.  
TITLE OF INVENTION: A STRAIN OF SACCCHAROMYCES CEREVISIAE  
TITLE OF INVENTION: EXPRESSING THE GENE ENCODING POTASSIUM TRANSPORTER MINK  
NUMBER OF SEQUENCES: 16  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Burton Rodney  
STREET: P.O. Box 4000  
CITY: Princeton  
STATE: New Jersey  
COUNTRY: U.S.A.  
ZIP: 08543-4000  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/118,101A  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Gaul, Timothy J.  
REGISTRATION NUMBER: 33,111  
REFERENCE/DOCKET NUMBER: DC27  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (609) 252-5901  
TELEFAX: (609) 252-4526  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 398 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..398  
US-08-118-101A-5  
Query Match 7.3%; Score 53.2; DB 1; Length 398;  
Best Local Similarity 63.6%; Pred. No. 5e-07;  
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1;

QY 223 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 282  
DB 141 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 200  
QY 283 CACTGTGAATCCAGAGACGGGAACTCCATGACCCCTTACCAACCACTAGATTG--T 339  
DB 201 CTACATCCGCTCCAGAGAGCTGGAGCATCTGAAACGACCATTCATGCTTACATGAGATC 260  
QY 340 AGAGACTGGCAGAGAAAGTACAAAGCCCAATC 373  
DB 261 CGATGCTGGCAGAGAGAGACCAAGGCTTATGTC 294

## RESULT 2

US-09-679-185-1  
Sequence 1, Application US/09679185  
Patent No. 6458542  
GENERAL INFORMATION:  
APPLICANT: George J., Alfred L.  
APPLICANT: Roden, Dan M  
TITLE OF INVENTION: METHOD OF SCREENING FOR SUSCEPTIBILITY TO  
TITLE OF INVENTION: DRUG-INDUCED CARDIAC ARRYTHMIA  
FILE REFERENCE: Attorney Docket No. 6458542 1242-33-2  
CURRENT APPLICATION NUMBER: US/09/679,185  
PRIOR FILING DATE: 2000-10-04  
PRIOR APPLICATION NUMBER: 60/158,696  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 1  
LENGTH: 436  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (29)..(418)  
PUBLICATION INFORMATION:  
JOURNAL: Biochem. Biophys. Res. Commun.  
VOLUME: 161  
PAGES: 176-181  
DATE: May-1989  
DATABASE ACCESSION NUMBER: GenBank M26685  
DATABASE ENTRY DATE: 1994-03-30  
US-09-679-185-1

Query Match  
Best Local Similarity 7.3%; Score 53.2; DB 4; Length 436;  
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1;

QY 223 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 282  
DB 160 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 219  
QY 283 CACTGTGAATCCAGAGACGGGAACTCCATGACCCCTTACCAACCACTAGATTG--T 339  
DB 220 CTACATCCGCTCCAGAGAGCTGGAGCATCTGAAACGACCATTCATGCTTACATGAGATC 279  
QY 340 AGAGACTGGCAGAGAAAGTACAAAGCCCAATC 373  
DB 280 CGATGCTGGCAGAGAGAGACCAAGGCTTATGTC 313

## RESULT 3

US-09-135-021-77  
Sequence 77, Application US/09135021A  
Patent No. 6150104  
GENERAL INFORMATION:  
APPLICANT: Splawski, Igor  
APPLICANT: Keating, Mark T.  
TITLE OF INVENTION: A HOMOZYGOUS MUTATION IN KVLQT1 WHICH CAUSES JERVELL  
FILE REFERENCE: 2323-128  
CURRENT APPLICATION NUMBER: US/09/135,021A

QY 223 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 282  
DB 324 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 383  
QY 283 CACTGTGAATCCAGAGACGGGAACTCCATGACCCCTTACCAACCACTAGATTG--T 339  
DB 384 CTACATCCGCTCCAGAGAGCTGGAGCATCTGAAACGACCATTCATGCTTACATGAGATC 443  
QY 340 AGAGACTGGCAGAGAAAGTACAAAGCCCAATC 373  
DB 444 CGATGCTGGCAGAGAGAGACCAAGGCTTATGTC 477

Query Match  
Best Local Similarity 7.3%; Score 53.2; DB 3; Length 1703;  
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1;

QY 223 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 282  
DB 324 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 383  
QY 283 CACTGTGAATCCAGAGACGGGAACTCCATGACCCCTTACCAACCACTAGATTG--T 339  
DB 384 CTACATCCGCTCCAGAGAGCTGGAGCATCTGAAACGACCATTCATGCTTACATGAGATC 443  
QY 340 AGAGACTGGCAGAGAAAGTACAAAGCCCAATC 373  
DB 444 CGATGCTGGCAGAGAGAGACCAAGGCTTATGTC 477

## RESULT 4

US-09-135-020-3  
Sequence 3, Application US/09135020  
Patent No. 6274332  
GENERAL INFORMATION:  
APPLICANT: Keating, Mark T.  
APPLICANT: Splawski, Igor  
TITLE OF INVENTION: MUTATIONS IN THE KCNE1 GENE ENCODING HUMAN MINK WHICH  
TITLE OF INVENTION: CAUSE ARRYTHMIA SUSCEPTIBILITY THEREBY ESTABLISHING  
FILE REFERENCE: 2323-131  
CURRENT APPLICATION NUMBER: US/09/135,020  
PRIOR FILING DATE: 1998-08-17  
PRIOR APPLICATION NUMBER: 08/921,068  
EARLIER FILING DATE: 1997-08-29  
EARLIER APPLICATION NUMBER: 08/739,383  
EARLIER FILING DATE: 1996-10-29  
EARLIER APPLICATION NUMBER: 60/019,014  
EARLIER FILING DATE: 1995-12-22  
EARLIER APPLICATION NUMBER: 60/094,477  
NUMBER OF SEQ ID NOS: 114  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 3  
LENGTH: 1703  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (193)..(579)  
US-09-135-020-3

Query Match  
Best Local Similarity 7.3%; Score 53.2; DB 3; Length 1703;  
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1;

QY 223 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 282  
DB 324 CCTGTACCTCATGTGATGATGTAATGTTCTTTTCATCATGTCGATCCATCTGTGTAG 383

```

RESULT 7
US-09-597-735-3
Sequence 3, Application US/09597735
Patent No. 6420124
GENERAL INFORMATION:
APPLICANT: Keating, Mark T.
APPLICANT: Sanguinetti, Michael C.
APPLICANT: Curran, Mark E.
APPLICANT: Landes, Gregory M.
APPLICANT: Connors, Timothy D.
APPLICANT: Burn, Timothy C.
APPLICANT: Spilawski, Igor
TITLE OF INVENTION: KVLQ1 - A LONG QT SYNDROME GENE
FILE REFERENCE: 2323-133
CURRENT APPLICATION NUMBER: US/09/597, 735
CURRENT FILING DATE: 2000-06-19
EARLIER APPLICATION NUMBER: 09/135, 010
EARLIER FILING DATE: 1998-08-17
EARLIER APPLICATION NUMBER: 60/034, 477
EARLIER FILING DATE: 1998-07-29
EARLIER APPLICATION NUMBER: 06/921, 068
EARLIER FILING DATE: 1997-08-29
EARLIER APPLICATION NUMBER: 08/739, 383
EARLIER FILING DATE: 1996-10-29
EARLIER APPLICATION NUMBER: 60/019, 014
EARLIER FILING DATE: 1995-12-22
NUMBER OF SEQ ID NOS: 116
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 1703
TYPE: DNA
ORGANISM: Homo sapiens

```



248 ATGTTCTTTCATCATCGTGGCATC 274

Db 2522 TGGATTCTCTCTCAGTATGCTTC 2548

## RESULT 13

US-08-232-463-14/c  
; Sequence 14, Application US/08232463  
; Patent No. 5670367  
; GENERAL INFORMATION:  
; APPLICANT: DORNER, F.  
; APPLICANT: SCHEIFLINGER, F.  
; APPLICANT: FALKNER, F. G.  
; TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS  
; NUMBER OF SEQUENCES: 52  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Foley & Lardner  
; STREET: 1800 Diagonal Road, Suite 500  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22313-0299  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/232,463  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/07/935,313  
; FILING DATE:  
; APPLICATION NUMBER: EP 91 114 300.6  
; FILING DATE: 26-AUG-1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: BENT, Stephen A.  
; REGISTRATION NUMBER: 29,768  
; REFERENCE/DOCKET NUMBER: 30472/114 IMMU  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (703)836-9300  
; TELEFAX: (703)683-4109  
; TELEX: 899149  
; INFORMATION FOR SEQ ID NO: 14:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 7218 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; IMMEDIATE SOURCE:  
; CLONE: pTZ9pt-Fis  
; US-08-232-463-14

Query Match 4.9%; Score 36.2; DB 1; Length 7218;  
Best Local Similarity 2.3%; Pred. No. 0.58;  
Matches 8; Conservative 191; Mismatches 144; Indels 0; Gaps 0;

QY 277 GGTGAGACGTGTAATCCAGAGACGGAACCTCAATGACCCCTACACAGTACAT 336  
DB 1398 RRR 1339  
QY 337 TGTGAGACGTGAGAGAAAGTACAGACCAATCTTGAATCTAGAGAAATCGAAGC 396  
DB 1338 RRR 1279  
QY 397 CACCATTCATGAGAAATGCTGCTGGCTGCTCAAAATGTCCCTGATAGAGAGAAA 456  
DB 1278 RRR 1219  
QY 457 GGCACCAAGTACATCTGACGTCCAGACATGAGAGATGCCGACGAGCAATC 516  
DB 1218 RRR 1159

QY 517 CAATGTCTTTCTTAGAGAAAGTACTCTCTCTTTGTGAGATTTTCATGCA 576  
DB 1158 RRR 1099

QY 577 GATTATGCTTGGCCCAATTAAGATAGATGACATTTCAATCTC 619  
DB 1098 RRR 1056

## RESULT 14

US-09-016-434-1360  
; Sequence 1360, Application US/09016434  
; Patent No. 6500938  
; GENERAL INFORMATION:  
; APPLICANT: Janice Au-Young  
; APPLICANT: Jeffrey J. Selhammer  
; TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING  
; NUMBER OF SEQUENCES: 1490  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.  
; STREET: 3174 PORTER DRIVE  
; CITY: PALO ALTO  
; STATE: CALIFORNIA  
; COUNTRY: USA  
; ZIP: 94304  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/016,434  
; FILING DATE: HEREWITH  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Zeller, Karen J.  
; REGISTRATION NUMBER: 37,071  
; REFERENCE/DOCKET NUMBER: PA-0002 US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (650) 855-0555  
; TELEFAX: (650) 845-4166  
; INFORMATION FOR SEQ ID NO: 1360:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1335 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; IMMEDIATE SOURCE:  
; LIBRARY: GENBANK  
; CLONE: 9408691  
; US-09-016-434-1360

Query Match 4.9%; Score 36; DB 4; Length 1335;  
Best Local Similarity 52.7%; Pred. No. 0.26;  
Matches 78; Conservative 0; Mismatches 70; Indels 0; Gaps 0;

QY 188 GCCAAGTTGATCTGAGAACTTCTAATGTCATCTCTGTACTCTGATGATGGA 247  
DB 868 GCCAAGGCGTGGGGTGTACACGACATCACTACGAGGCGCCATGATCTGTCCTG 927  
QY 248 AAGTTCTCTTATCATCTGCTGCCATCTCTGTGAGACATGTGAATCCAGAGAGGGA 307  
DB 928 CTGATCAATTTTCATCTCTTTTCAACATCGTCCGACATCTCATGACCAAGCTCCGGGCA 987  
QY 308 CACTCCAATGACCCCTACACAGTACA 335  
DB 988 TCCACCACTCTGAGACCATTCAGTACA 1015

## RESULT 15

US-08-110-286A-1

; Sequence 1, Application US/08110286A

; Patent No. 5728545

; GENERAL INFORMATION:

; APPLICANT: Perrin, Marilyn H.

; APPLICANT: Chen, Ruoping

; APPLICANT: Lewis, Kathy A.

; APPLICANT: Vale Jr., Wylie W.

; APPLICANT: Donaldson, Cynthia J.

; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF

; TITLE OF INVENTION: CRF RECEPTOR (S)

; NUMBER OF SEQUENCES: 6

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Pretty, Schroeder, Brueggemann &amp; Clark

; STREET: 444 South Flower Street, Suite 2000

; CITY: Los Angeles

; STATE: CA

; COUNTRY: USA

; ZIP: 90071

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/110,286A

; FILING DATE:

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/079,320

; FILING DATE: 18-JUN-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: Reiter, Stephen B.

; REGISTRATION NUMBER: 31,192

; REFERENCE/DOCKET NUMBER: P41 9439

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 619-546-4737

; TELEFAX: 619-546-9392

; INFORMATION FOR SEQ. ID NO: 1:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1380 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: both

; TOPOLOGY: both

; MOLECULE TYPE: cDNA

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 82..1329

; OTHER INFORMATION: /product= "HUMAN PITUITARY

; OTHER INFORMATION: CRF-RECEPTOR"

; OTHER INFORMATION: /note= "this sequence is encoded by clone

; OTHER INFORMATION: "CRF-R1."

; US-08-110-286A-1

Query Match 4.9%; Score 36; DB 1; Length 1380;

Best Local Similarity 52.7%; Pred. No. 0.26; Mismatches 70; Indels 0; Gaps 0;

Matches 78; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 188 GCCAAGTGTGCTGAGAACTTCTACTATGTCATCTGATCTGATGCTGATGATGGA 247
   |||||
DB 862 GGCANAAGGCTGGGGGTGACACGACTCATCTACAGGGCCCATGATCTGTCCTG 921
   |||||
QY 248 ATGTTCTTTTCATCATCGTGGCCATCTGCTGAGCACTGTGAATCCAGAGACGGGAA 307
   |||||
DB 922 CTGATCAATTCATCTTCTTTTCAACATGTCGATCCGATCTCATGACCAAGCTCCGGGCA 981
   |||||
QY 308 CACTCAATGACCCCTACGACGAGTACA 335
   |||||
DB 982 TCCACCACTGTGAGACATTCAGTACA 1009
   |||||
```

Search completed: October 31, 2003, 03:33:24  
Job time : 58.0573 secs

**THIS PAGE BLANK (USPTO)**



GenCore version 5.1.6  
Copyright (c) 1993 - 2003 Comugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 31, 2003, 03:28:33 ; Search time 814.04 Seconds  
(without alignments)  
2445.688 Million cell updates/sec

Title: US-09-550-163-1

Perfect score: 732

Sequence: 1 caatccagaagaagatccgct.....atcaataaagccaattc 732

Scoring table:

IDENTITY\_NIC  
Gapop 10.0 , Gapext 1.0

Searched: 1811591 seqs, 1359896290 residues

Total number of hits satisfying chosen parameters: 3623182

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications NA:\*

- 1: /cgn2\_6/ptodata/1/pubpna/US07\_PUBCOMB.seq:\*
- 2: /cgn2\_6/ptodata/1/pubpna/PCT\_NEW\_PUB.seq:\*
- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq:\*
- 4: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*
- 5: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*
- 6: /cgn2\_6/ptodata/1/pubpna/PCTUS\_PUBCOMB.seq:\*
- 7: /cgn2\_6/ptodata/1/pubpna/US08\_NEW\_PUB.seq:\*
- 8: /cgn2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*
- 9: /cgn2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*
- 10: /cgn2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*
- 11: /cgn2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*
- 12: /cgn2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*
- 13: /cgn2\_6/ptodata/1/pubpna/US10A\_PUBCOMB.seq:\*
- 14: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq:\*
- 15: /cgn2\_6/ptodata/1/pubpna/US10A\_NEW\_PUB.seq:\*
- 16: /cgn2\_6/ptodata/1/pubpna/US10B\_NEW\_PUB.seq:\*
- 17: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	730.4	99.8	732	US-10-000-151B-5	Sequence 5, Appli
2	730.4	99.8	113604	US-10-227-195A-1	Sequence 1, Appli
3	730.4	99.8	113604	US-10-227-195A-2	Sequence 2, Appli
4	372	50.8	372	US-09-864-761-33139	Sequence 33139, A
5	368	50.3	450	US-09-864-761-3463	Sequence 3463, Ap
6	312	42.6	312	US-09-864-761-20233	Sequence 20233, A
7	306	41.8	471	US-09-864-761-16671	Sequence 16671, A
8	60	8.2	60	US-09-908-975-10209	Sequence 10209, A
9	53.8	7.3	65	US-09-908-975-1989	Sequence 1989, A
c 10	53.2	7.3	231	US-09-864-761-20783	Sequence 20783, A
c 11	53.2	7.3	390	US-09-864-761-17593	Sequence 17593, A
12	53.2	7.3	390	US-10-224-683-4	Sequence 4, Appli
13	53.2	7.3	436	US-10-260-861-1	Sequence 1, Appli
14	53.2	7.3	949	US-10-101-510-498	Sequence 498, App
15	53.2	7.3	1200	US-10-224-683-5	Sequence 5, Appli
16	53.2	7.3	1703	US-10-368-643-3	Sequence 3, Appli

17	53.2	7.3	1703	US-10-138-316-3	Sequence 3, Appli
c 18	53.2	7.3	113604	US-10-227-195A-1	Sequence 1, Appli
c 19	53.2	7.3	113604	US-10-227-195A-2	Sequence 2, Appli
c 20	51.6	7.0	436	US-10-260-861-3	Sequence 3, Appli
c 21	50.8	6.9	468	US-09-864-761-4026	Sequence 4026, Ap
c 22	46	6.3	381	US-09-864-761-810	Sequence 810, App
c 23	41	5.6	6408	US-10-311-455-1094	Sequence 1094, Ap
24	39.4	5.4	41	US-10-224-683-173	Sequence 173, App
25	39.4	5.4	41	US-10-224-683-174	Sequence 174, App
26	39.4	5.4	41	US-10-224-683-175	Sequence 175, App
27	39.4	5.4	42	US-10-224-683-172	Sequence 172, App
28	37.4	5.0	41	US-10-312-841-1	Sequence 1, Appli
29	36.4	5.0	41	US-10-312-841-2	Sequence 2, Appli
30	36	4.9	1146	US-09-853-386-111	Sequence 111, App
31	36	4.9	1146	US-09-799-978-5	Sequence 5, Appli
32	36	4.9	1146	US-10-225-567A-379	Sequence 379, App
33	36	4.9	1206	US-09-853-386-107	Sequence 107, App
34	36	4.9	1206	US-09-853-386-117	Sequence 117, App
35	36	4.9	1206	US-09-799-978-7	Sequence 7, Appli
36	36	4.9	1285	US-09-799-978-3	Sequence 3, Appli
37	36	4.9	1495	US-09-191-724-1	Sequence 1, Appli
38	36	4.9	1582	US-09-191-724-14	Sequence 14, Appli
39	36	4.9	2536	US-09-799-978-1	Sequence 1, Appli
40	36	4.9	2579	US-09-822-830A-30	Sequence 30, Appli
c 41	36	4.9	3673778	US-10-312-841-1	Sequence 1, Appli
42	35.8	4.9	4057	US-10-240-453-261	Sequence 261, App
43	35.8	4.9	4057	US-10-239-676-181	Sequence 181, App
44	34.8	4.8	527	US-10-184-644-522	Sequence 522, App
45	34.8	4.8	527	US-10-184-634-522	Sequence 522, App

#### ALIGNMENTS

RESULT 1  
US-10-000-151B-5  
; Sequence 5, Application US/10000151B  
; Publication No. US20030013136A1  
; GENERAL INFORMATION:  
; APPLICANT: Balseer, Jeffrey R.  
; APPLICANT: George, Alfred L.  
; TITLE OF INVENTION: HUMAN KCR1 REGULATION OF HERG POTASSIUM CHANNEL BLOCK  
; FILE REFERENCE: Vandebilt Ref No. US20030013136A1 VU0120; Attorney Docket No. US2003  
; CURRENT APPLICATION NUMBER: US/10/000.151B  
; CURRENT FILING DATE: 2000-10-30  
; NUMBER OF SEQ ID NOS: 5  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 5  
; LENGTH: 732  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-000-151B-5

Query Match 99.8% Score 730.4; DB 14; Length 732;  
Best Local Similarity 99.9%; Pred. No. 7.9e-209;  
Matches 731; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY	1	CAATCCGAAAGATCGCTTTTCTAACCCTTGTGCGCTATTATTTAATTGCA	60
DB	1	CAATCCGAAAGATCGCTTTTCTAACCCTTGTGCGCTATTATTTAATTGCA	60
QY	61	GCAGAGGAGGAGCATGTCTACTTATTCATTTTCACAGAGCGTGAAGAGCTTCCG	120
DB	61	GCAGAGGAGGAGCATGTCTACTTATTCATTTTCACAGAGCGTGAAGAGCTTCCG	120
QY	121	AAGATTTTATTTATTTATGACCAATTTGCGCCAGAACCAACAGCTGACCAAGAGC	180
DB	121	AAGATTTTATTTATTTATGACCAATTTGCGCCAGAACCAACAGCTGACCAAGAGC	180
QY	181	CCTCCACCAAGTGTATGCTGAGAACTTTTACATATTCATCTGTAACCTCATGTAT	240
DB	181	CCTCCACCAAGTGTATGCTGAGAACTTTTACATATTCATCTGTAACCTCATGTAT	240

QY 241 GATTGAAATGTTCTTTTCATTCATCGTGCCATCTGCTGGAGCACTGTGAATCCAAAG 300  
 Db 241 GATTGAAATGTTCTTTTCATTCATCGTGCCATCTGCTGGAGCACTGTGAATCCAAAG 300  
 QY 301 ACGGGAACACTCCAAATGACCCCTACCAACGATCATTTGTAGAGACTGGAGAAAAGTA 360  
 Db 301 ACGGGAACACTCCAAATGACCCCTACCAACGATCATTTGTAGAGACTGGAGAAAAGTA 360  
 QY 361 CAAGAGCCAAATCTTGAATCTAGAAAGATGGAAGGCCACCATCATAGAAACAATGGTGC 420  
 Db 361 CAAGAGCCAAATCTTGAATCTAGAAAGATGGAAGGCCACCATCATAGAAACAATGGTGC 420  
 QY 421 GCGTGGGTTCAAAATGTCCCCCTGATTAAGGAGAAAGCAACAAGCTAACATCTGACGTC 480  
 Db 421 GCGTGGGTTCAAAATGTCCCCCTGATTAAGGAGAAAGCAACAAGCTAACATCTGACGTC 480  
 QY 481 CAGACATGAAGAGATGCGACATGCGCAAGGCAAAATCCAAATGTCTTGTGAGAAAGAA 540  
 Db 481 CAGACATGAAGAGATGCGACATGCGCAAGGCAAAATCCAAATGTCTTGTGAGAAAGAA 540  
 QY 541 GTGAGTTCCTTGTCTTTGTTGAGAAATTTTCATGAGATTAATGTTGGCCAAATAAGA 600  
 Db 541 GTGAGTTCCTTGTCTTTGTTGAGAAATTTTCATGAGATTAATGTTGGCCAAATAAGA 600  
 QY 601 TAGATGACATTTCAATCTCAGATGATTAATGCTTGTGTTGAGCAATATTTTGTGCTGA 660  
 Db 601 TAGATGACATTTCAATCTCAGATGATTAATGCTTGTGTTGAGCAATATTTTGTGCTGA 660  
 QY 661 AGACCTCTTTTACTTTCGCGGCAAGTGAATGATTTTATTCATATTCATATGATGAAT 720  
 Db 661 AGACCTCTTTTACTTTCGCGGCAAGTGAATGATTTTATTCATATTCATATGATGAAT 720  
 QY 721 AAAGCCAAATTT 732  
 Db 721 AAAGCCAAATTT 732

# RESULT 2 US-10-227-195A-1

; Sequence 1, Application US/10227195A  
 ; Publication No. US20030077633A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Cox, David  
 ; APPLICANT: Arnold, Deana  
 ; TITLE OF INVENTION: Haplotype structure of chromosome 21  
 ; FILE REFERENCE: 1030U1  
 ; CURRENT APPLICATION NUMBER: US/10/227,195A  
 ; NUMBER OF SEQ ID NOS: 2  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 1  
 ; LENGTH: 113604  
 ; TYPE: DNA  
 ; ORGANISM: Human  
 ; FEATURE:  
 ; NAME/KEY: misc feature  
 ; LOCATION: 7175, 7204, 36972, 66372, 76921, 81512, 88727  
 ; OTHER INFORMATION: n = G or C  
 US-10-227-195A-1

Query Match 99.8%; Score 730.4; DB 14; Length 113604;  
 Best Local Similarity 99.9%; Pred. No. 1.5e-207;  
 Matches 731; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CAATCCAGAAAAGATCCGTTTCTTAACCTTGTGCGCCATTTTATTTAATTGCA 60  
 Db 17403 CAATCCAGAAAAGATCCGTTTCTTAACCTTGTGCGCCATTTTATTTAATTGCA 17462  
 QY 61 GCAGAGGAGAGAGATGTCATTTATTCATTTTACACAGACGCTGGAAGACGTTCCG 120  
 Db 17463 GCAGAGGAGAGAGATGTCATTTATTCATTTTACACAGACGCTGGAAGACGTTCCG 17522  
 QY 121 AAGGATTTTATTAATTATATGACAAATGGCGCCAGAACACAAAGCTGAGCAAGAGGC 180

Db 17523 AAGGATTTTATTAATTATATGAGACAAATGGCGCCAGAACACAAAGCTGAGCAAGAGGC 17582  
 QY 181 CCTCCAGGCAAAAGTTGATGCTGAGAACTTTATATGATCATCTCTACTCATGTGTAT 240  
 Db 17583 CCTCCAGGCAAAAGTTGATGCTGAGAACTTTATATGATCATCTCTACTCATGTGTAT 17642  
 QY 241 GATTGAAATGTTCTTTTCATCATGCTGCGCCATCTGTGAGACACTGTGAAAATCCAAAG 300  
 Db 17643 GATTGAAATGTTCTTTTCATCATGCTGCGCCATCTGTGAGACACTGTGAAAATCCAAAG 17702  
 QY 301 ACGGGAACACTCCAAATGACCCCTACCAACGATCATTTGTAGAGACTGGAGAAAAGTA 360  
 Db 17703 ACGGGAACACTCCAAATGACCCCTACCAACGATCATTTGTAGAGACTGGAGAAAAGTA 17762  
 QY 361 CAAGAGCCAAATCTTGAATCTAGAAAGATGGAAGGCCACATCCATGAAACAATGGTGC 420  
 Db 17763 CAAGAGCCAAATCTTGAATCTAGAAAGATGGAAGGCCACATCCATGAAACAATGGTGC 17822  
 QY 421 GCGTGGGTTCAAAATGTCCCCCTGATTAAGGAGAAAGCAACAAGCTAACATCTGACGTC 480  
 Db 17823 GCGTGGGTTCAAAATGTCCCCCTGATTAAGGAGAAAGCAACAAGCTAACATCTGACGTC 17882  
 QY 481 CAGACATGAAGAGATGCGACATGCGCAAGGCAAAATCCAAATGTCTTGTGAGAAAGAA 540  
 Db 17883 CAGACATGAAGAGATGCGACATGCGCAAGGCAAAATCCAAATGTCTTGTGAGAAAGAA 17942  
 QY 541 GTGAGTTCCTTGTCTTTGTTGAGAAATTTTCATGAGATTAATGTTGGCCAAATAAGA 600  
 Db 17943 GTGAGTTCCTTGTCTTTGTTGAGAAATTTTCATGAGATTAATGTTGGCCAAATAAGA 18002  
 QY 601 TAGATGACATTTCAATCTCAGATGATTAATGCTTGTGTTGAGCAATATTTTGTGCTGA 660  
 Db 18003 TAGATGACATTTCAATCTCAGATGATTAATGCTTGTGTTGAGCAATATTTTGTGCTGA 18062  
 QY 661 AGACCTCTTTTACTTTCGCGGCAAGTGAATGATTTTATTCATATTCATATGATGAAT 720  
 Db 18063 AGACCTCTTTTACTTTCGCGGCAAGTGAATGATTTTATTCATATTCATATGATGAAT 18122  
 QY 721 AAAGCCAAATTT 732  
 Db 18123 AAAGCCAAATTT 18134

# RESULT 3 US-10-227-195A-2

; Sequence 2, Application US/10227195A  
 ; Publication No. US20030077633A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Cox, David  
 ; APPLICANT: Arnold, Deana  
 ; TITLE OF INVENTION: Haplotype structure of chromosome 21  
 ; FILE REFERENCE: 1030U1  
 ; CURRENT APPLICATION NUMBER: US/10/227,195A  
 ; NUMBER OF SEQ ID NOS: 2  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 2  
 ; LENGTH: 113604  
 ; TYPE: DNA  
 ; ORGANISM: Human  
 US-10-227-195A-2

Query Match 99.8%; Score 730.4; DB 14; Length 113604;  
 Best Local Similarity 99.9%; Pred. No. 1.5e-207;  
 Matches 731; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CAATCCAGAAAAGATCCGTTTCTTAACCTTGTGCGCCATTTTATTTAATTGCA 60  
 Db 17403 CAATCCAGAAAAGATCCGTTTCTTAACCTTGTGCGCCATTTTATTTAATTGCA 17462  
 QY 61 GCAGAGGAGAGAGATGTCATTTATTCATTTTACACAGACGCTGGAAGAGCTCTTCCG 120

Db	17463	CCAGAGGGAAGCAGTCTACTTATTCATATTCACACACAGCCTGGAAGACGTCTTCGG	17522
Qy	121	AAGATTTTATTTACTTATATGACAAATTTGGCCGACAGACACAAACGCTGACGAAGGC	180
Db	17523	AAGATTTTATTTACTTATATGACAAATTTGGCCGACAGACACAAACGCTGACGAAGGC	17582
Qy	181	CCTCAAGCCCAAAGTGAATGCTGGAACCTTCTACTATATGATCATCTGTACCTCATGTGTAT	240
Db	17583	CCTCAAGCCCAAAGTGAATGCTGGAACCTTCTACTATATGATCATCTGTACCTCATGTGTAT	17642
Qy	241	GATTGGAATGTTCTCTTTTCATCATCGTGGCCATCTGTTGAGACACTGTGAAATCCAAAG	300
Db	17643	GATTGGAATGTTCTCTTTTCATCATCGTGGCCATCTGTTGAGACACTGTGAAATCCAAAG	17702
Qy	301	ACGGGAACACTCCATAGACCCCTTACACACAGTACATTTGAGAGACTGTGGCAAGAAAGTA	360
Db	17703	ACGGGAACACTCCATAGACCCCTTACACACAGTACATTTGAGAGACTGTGGCAAGAAAGTA	17762
Qy	361	CAAGAAGCCAAATCTTGAATCTAGAAAGAAATGGAAGGCCACATCATAGAAACATTTGTGC	420
Db	17763	CAAGAAGCCAAATCTTGAATCTAGAAAGAAATGGAAGGCCACATCATAGAAACATTTGTGC	17822
Qy	421	GGCTGGGTTCAAATATGTCCTCCCTGATTAAGGAGAAAGGACCAAGCTACATCTGACGTC	480
Db	17823	GGCTGGGTTCAAATATGTCCTCCCTGATTAAGGAGAAAGGACCAAGCTACATCTGACGTC	17882
Qy	481	CAGACATGAAGAGATGCGCAGTCCACGAGGCCAAATCCAAATTTGCTTTGTAGAGAA	540
Db	17883	CAGACATGAAGAGATGCGCAGTCCACGAGGCCAAATCCAAATTTGCTTTGTAGAGAA	17942
Qy	541	GTCGATTCCTTCTCTTCTTTGTTGAGAAATTTTCATGAGATTAATGTGTTGGCCATTAAGA	600
Db	17943	GTCGATTCCTTCTCTTCTTTGTTGAGAAATTTTCATGAGATTAATGTGTTGGCCATTAAGA	18002
Qy	601	TAGATGACATTTCAATCTCAGTGAATTTATGCTTGTGAGCAATATTTTGTGTCGA	660
Db	18003	TAGATGACATTTCAATCTCAGTGAATTTATGCTTGTGAGCAATATTTTGTGTCGA	18062
Qy	661	AGACCTCTTTTACTTTCGCGGCAAGTAAATGTCAATTTATCAATATCAATGATGAAAT	720
Db	18063	AGACCTCTTTTACTTTCGCGGCAAGTAAATGTCAATTTATCAATATCAATGATGAAAT	18122
Qy	721	AAAGCCAAATTT 732	
Db	18123	AAAGCCAAATTT 18134	

```

1  PRIOR APPLICATION NUMBER: PCT/US01/00667
2  PRIOR FILING DATE: 2001-01-30
3  PRIOR APPLICATION NUMBER: PCT/US01/00664
4  PRIOR FILING DATE: 2001-01-30
5  PRIOR APPLICATION NUMBER: PCT/US01/00669
6  PRIOR FILING DATE: 2001-01-30
7  PRIOR APPLICATION NUMBER: PCT/US01/00665
8  PRIOR FILING DATE: 2001-01-30
9  PRIOR APPLICATION NUMBER: PCT/US01/00668
10 PRIOR FILING DATE: 2001-01-30
11 PRIOR APPLICATION NUMBER: PCT/US01/00663
12 PRIOR FILING DATE: 2001-01-30
13 PRIOR APPLICATION NUMBER: PCT/US01/00662
14 PRIOR FILING DATE: 2001-01-30
15 PRIOR APPLICATION NUMBER: PCT/US01/00661
16 PRIOR FILING DATE: 2001-01-30
17 PRIOR APPLICATION NUMBER: PCT/US01/00670
18 PRIOR FILING DATE: 2001-01-30
19 PRIOR APPLICATION NUMBER: US 60/234,687
20 PRIOR FILING DATE: 2000-09-21
21 PRIOR APPLICATION NUMBER: US 09/608,408
22 PRIOR FILING DATE: 2000-06-30
23 PRIOR APPLICATION NUMBER: US 09/774,203
24 PRIOR FILING DATE: 2001-01-29
25 NUMBER OF SEQ ID NOS: 49117
26 SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
27 SEQ ID NO 33139
28 LENGTH: 372
29 TYPE: DNA
30 ORGANISM: Homo sapiens
31 FEATURE:
32 INFORMATION: MAP TO AP00120.1
33 OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.98
34 OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 0.67
35 OTHER INFORMATION: EST HUMAN HIT: A154452.1, EVALU0.00e+00
36 OTHER INFORMATION: SWISSPROT HIT: Q9YUJ6, EVALU0.00e+00
37 OTHER INFORMATION: NT HIT: g111526220, EVALU0.00e+00
38 US-09-864-761-33139
39
40 Query Match 50.8%; Score 372; DB 9; Length 372;
41 Best Local Similarity 100.0%; Pred. No. 2.7e-101; Indels 0; Gaps 0
42 Matches 372; Conservative 0; Mismatches 0;
43
44 QY 74 ATGCTACTTATTCACATTTTCACACAGACGCTGGAGAAGACGCTTCCGAAGATTTTATTT 133
45 Db 1 ATGCTACTTATTCACATTTTCACACAGACGCTGGAGAAGACGCTTCCGAAGATTTTATTT 60
46
47 QY 134 ACTTATATGCAATTTGGCGCCAGAACCAACACGCTGAGCAAGAGGCCCTCCAAAGCCAAA 193
48 Db 61 ACTTATATGCAATTTGGCGCCAGAACCAACACGCTGAGCAAGAGGCCCTCCAAAGCCAAA 120
49
50 QY 194 GTTGATGCTGGAAGACTTCTACTATAGTATCCTGTAACTGACAGGTGATGATTTGGAATGTT 253
51 Db 121 GTTGATGCTGGAAGACTTCTACTATAGTATCCTGTAACTGACAGGTGATGATTTGGAATGTT 180
52
53 QY 254 TCTTTCAATCATCGAGGCATCTCTGTGAGCACTGTGAAAATCCAAAGAGCGGAACACTCC 313
54 Db 181 TCTTTCAATCATCGAGGCATCTCTGTGAGCACTGTGAAAATCCAAAGAGCGGAACACTCC 240
55
56 QY 314 AATGACCCCTTACACCAAGTACATTGTGAGAGACTGGCGAGAAAAGTACAAAGGCCAAATC 373
57 Db 241 AATGACCCCTTACACCAAGTACATTGTGAGAGACTGGCGAGAAAAGTACAAAGGCCAAATC 300
58
59 QY 374 TTGAATCTAGAAGAAATGGAAGGCCAACATCATAGAACATTTGGTGGCGGTGTTCAA 433
60 Db 301 TTGAATCTAGAAGAAATGGAAGGCCAACATCATAGAACATTTGGTGGCGGTGTTCAA 360
61
62 QY 434 ATGTCCCCCTGA 445
63 Db 361 ATGTCCCCCTGA 372

```

```

US-09-864-761-3463
: Sequence 3463, Application US/09864761
: Patent No. US20020048763A1
: GENERAL INFORMATION:
: APPLICANT: Penn, Sharon G.
: APPLICANT: Rank, David R.
: APPLICANT: Hanzel, David K.
: APPLICANT: Chen, Wensheng
: TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
: TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
: FILE REFERENCE: Aecmtca-X-1
: CURRENT FILING DATE: 2001-05-23
: PRIOR APPLICATION NUMBER: US 60/180,312
: PRIOR FILING DATE: 2000-02-04
: PRIOR APPLICATION NUMBER: US 60/207,456
: PRIOR FILING DATE: 2000-05-26
: PRIOR APPLICATION NUMBER: US 09/632,366
: PRIOR FILING DATE: 2000-08-03
: PRIOR APPLICATION NUMBER: GB 24263.6
: PRIOR FILING DATE: 2000-10-04
: PRIOR APPLICATION NUMBER: US 60/236,359
: PRIOR FILING DATE: 2000-09-27
: PRIOR APPLICATION NUMBER: PCT/US01/00666
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00667
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00664
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00669
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00665
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00668
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00663
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00662
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00661
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00670
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: US 60/234,687
: PRIOR FILING DATE: 2000-09-21
: PRIOR APPLICATION NUMBER: US 09/608,408
: PRIOR FILING DATE: 2000-06-30
: PRIOR APPLICATION NUMBER: US 09/774,203
: PRIOR FILING DATE: 2001-01-29
: NUMBER OF SEQ ID NOS: 49117
: SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
: SEQ ID NO 3463
: LENGTH: 450
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: OTHER INFORMATION: MAP TO AP000052.1
: OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.1
: OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 1.1
: OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.3
: OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.92
: OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.4
: OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1
: OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.1
: OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.2
: OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.94
: OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.88
US-09-864-761-3463

```

Qy	GAATCAGAAAAAGATCCGTTTTCTTAACCTTGTGCTATTATTAATTAATTGCA	60
Db	CAATTCAGAAAAGATCCGTTTTCTTAACCTTGTGCTATTATTAATTAATTGCA	142
Qy	GCAGAGGGAAGACATGCTCTTATTCCAATTTCAACAGACGCTGGAAGACGTCTCG	120
Db	GCAGAGGGAAGACATGCTCTTATTCCAATTTCAACAGACGCTGGAAGACGTCTCG	202
Qy	AAGGATTTTATTTACTTATATGACAAATTGGCGCCAGAACAAACAGCTGAGCAAGGCG	180
Db	AAGGATTTTATTTACTTATATGACAAATTGGCGCCAGAACAAACAGCTGAGCAAGGCG	262
Qy	CCGCCAAGCAAGTTGATGCTGAGACATCTTCACTATGTCATCCTGTACCGCATGGAT	240
Db	CTTCGAAGCAAGTTGATGCTGAGACATCTTCACTATGTCATCCTGTACCGCATGGAT	322
Qy	GATTGGAATGTTCTCTTTCATCATCGTGGCCATCTGGTGAGCACTGTGAATCCAGAG	300
Db	GATTGGAATGTTCTCTTTCATCATCGTGGCCATCTGGTGAGCACTGTGAATCCAGAG	382
Qy	ACGGGAACACTCCATGACCCCTACCAACAGTACATTGTAGAGACTGGCAGGAAAACTA	360
Db	ACGGGAACACTCCATGACCCCTACCAACAGTACATTGTAGAGACTGGCAGGAAAACTA	442
Qy	CAAGAGCC	368
Db	CAAGAGCC	450

RESULT 6  
US-09-864-761-20233  
Sequence 20233, Application US/09864761  
Patent No. US20020048763A1  
GENERAL INFORMATION:  
APPLICANT: Penn, Sharon G.  
APPLICANT: Rank, David R.  
APPLICANT: Hanzel, David K.  
APPLICANT: Chen, Wensheng  
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY  
FILE REFERENCE: Aeomica-X-1  
CURRENT APPLICATION NUMBER: US/09/864,761  
CURRENT FILING DATE: 2001-05-23  
PRIOR APPLICATION NUMBER: US 60/180,312  
PRIOR FILING DATE: 2000-02-04  
PRIOR APPLICATION NUMBER: US 60/207,456  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: US 09/632,366  
PRIOR FILING DATE: 2000-08-03  
PRIOR APPLICATION NUMBER: GB 24263.6  
PRIOR FILING DATE: 2000-10-04  
PRIOR APPLICATION NUMBER: US 60/236,359  
PRIOR FILING DATE: 2000-09-27  
PRIOR APPLICATION NUMBER: PCT/US01/00666  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00667  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00664  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00669  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00665  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00668  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00663  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00662  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00661  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00670  
PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: US 60/234,687  
 PRIOR FILING DATE: 2000-09-21  
 PRIOR APPLICATION NUMBER: US 09/608,408  
 PRIOR FILING DATE: 2000-06-30  
 PRIOR APPLICATION NUMBER: US 09/774,203  
 PRIOR FILING DATE: 2001-01-29  
 NUMBER OF SEQ ID NOS: 49117  
 SOFTWARE: Annomax Sequence Listing Engine vers. 1.1  
 SEQ ID NO: 20233  
 LENGTH: 312  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 OTHER INFORMATION: MAP TO AP000052.1  
 OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.1  
 OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 1.1  
 OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.3  
 OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.92  
 OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.4  
 OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1  
 OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.1  
 OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.2  
 OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.94  
 OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.88  
 OTHER INFORMATION: EST HUMAN HIT: A1246239.1, EVALUE 0.00e+00  
 OTHER INFORMATION: SWISSPROT HIT: Q9Y6U6, EVALUE 3.00e-55  
 OTHER INFORMATION: NT HIT: AF302095.1, EVALUE 0.00e+00  
 US-09-864-761-20233

Query Match 42.6%; Score 312; DB 9; Length 312;  
 Best Local Similarity 100.0%; Pred. No. 2.6e-83;  
 Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

127 TTTTATTCTTATATGAGCAATTGGCGCAGAAACAGACCTGACCAAGGCCCTCC 186  
 1 TTTTATTCTTATATGAGCAATTGGCGCAGAAACAGACCTGACCAAGGCCCTCC 60  
 187 AGCCAAAGTGTGATGAGCACTTCTACTATGTCATCTGTACCTCATGGTATGTTGG 246  
 61 AGCCAAAGTGTGATGAGCACTTCTACTATGTCATCTGTACCTCATGGTATGTTGG 120  
 247 AATGTTCTCTTTCATCATCGTGGCCATCTGTGAGCACTGTGAATTCAGAGCGGGA 306  
 121 AATGTTCTCTTTCATCATCGTGGCCATCTGTGAGCACTGTGAATTCAGAGCGGGA 180  
 307 AACACTGCATGACCCCTTACCAACGATGATGAGAGACTGCGACAGAAAAGTCAAGAG 366  
 181 AACACTGCATGACCCCTTACCAACGATGATGAGAGACTGCGACAGAAAAGTCAAGAG 240  
 367 CCMAATCTTGAATCTGAGAAATCGAAGGCCACCATCCATGAGAACTTGGTGGCTGG 426  
 241 CCMAATCTTGAATCTGAGAAATCGAAGGCCACCATCCATGAGAACTTGGTGGCTGG 300  
 427 GTTCAAAATGTC 438  
 301 GTTCAAAATGTC 312

RESULT 7  
 US-09-864-761-16671  
 Sequence 16671, Application US/09864761  
 Patent No. US20020048763A1  
 GENERAL INFORMATION:  
 APPLICANT: Penn, Sharon G.  
 APPLICANT: Rank, David R.  
 APPLICANT: Hanzel, David K.  
 APPLICANT: Chen, Wensheng  
 TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
 FILE REFERENCE: Aomic-a-X-1  
 CURRENT APPLICATION NUMBER: US/09/864,761  
 CURRENT FILING DATE: 2001-05-23  
 PRIOR APPLICATION NUMBER: US 60/180,312

PRIOR FILING DATE: 2000-02-04  
 PRIOR APPLICATION NUMBER: US 60/207,456  
 PRIOR FILING DATE: 2000-05-26  
 PRIOR APPLICATION NUMBER: US 09/632,366  
 PRIOR FILING DATE: 2000-08-03  
 PRIOR APPLICATION NUMBER: GB 24263.6  
 PRIOR FILING DATE: 2000-10-04  
 PRIOR APPLICATION NUMBER: US 60/236,359  
 PRIOR FILING DATE: 2000-09-27  
 PRIOR APPLICATION NUMBER: PCT/US01/00666  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00667  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00664  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00669  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00665  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00668  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00663  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00662  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00661  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: PCT/US01/00670  
 PRIOR FILING DATE: 2001-01-30  
 PRIOR APPLICATION NUMBER: US 60/234,687  
 PRIOR FILING DATE: 2000-09-21  
 PRIOR APPLICATION NUMBER: US 09/608,408  
 PRIOR FILING DATE: 2000-06-30  
 PRIOR APPLICATION NUMBER: US 09/774,203  
 PRIOR FILING DATE: 2001-01-29  
 NUMBER OF SEQ ID NOS: 49117  
 SOFTWARE: Annomax Sequence Listing Engine vers. 1.1  
 SEQ ID NO: 16671  
 LENGTH: 471  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 OTHER INFORMATION: MAP TO AP000120.1  
 OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.98  
 OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 0.67  
 US-09-864-761-16671

Query Match 41.8%; Score 306; DB 9; Length 471;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-81;  
 Matches 306; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CAATCCGAAAGATCCGTTTCTTCTAACCTTGTGGCTATTTATTTAAATTGCA 60  
 166 CAATCCGAAAGATCCGTTTCTTCTAACCTTGTGGCTATTTATTTAAATTGCA 225  
 61 GCAGAGGGAAGCATGCTACTTATTCATTTTACACAGACGCTGAAGAGCTTCG 120  
 226 GCAGAGGGAAGCATGCTACTTATTCATTTTACACAGACGCTGAAGAGCTTCG 285  
 121 AAGATTTTATTTATTTATGACCAATTTGGCCAGAACACACAGCTGACCAAGGC 180  
 286 AAGATTTTATTTATTTATGACCAATTTGGCCAGAACACACAGCTGACCAAGGC 345  
 181 CCTCAAGCCAAAGTGAATGCTGAGAACTTGTACTATGTCATCTGTAATGCTGAT 240  
 346 CCTCAAGCCAAAGTGAATGCTGAGAACTTGTACTATGTCATCTGTAATGCTGAT 405  
 241 GATTGGAATGTTCTTTTCATCATGTCGACCATCTGCTGAGCACTGTGAATTCAGAG 300  
 406 GATTGGAATGTTCTTTTCATCATGTCGACCATCTGCTGAGCACTGTGAATTCAGAG 465  
 301 ACGGGA 306



Db 192 CTACATCCGCTCCAAGAGCTGGAGCACTCGAAGCACCATTCAACGCTTACATCGAGTC 251







QY 241 TCGTGCCATCTGTGAGACATGTGAATCCAGAGACGGAACTCTCAATGACCCCT 300  
|  
|  
|  
Db 264 TCGTGCCATCTGTGAGACATGTGAATCCAGAGACGGAACTCTCAATGACCCCT 323  
|  
|  
|  
QY 301 ACCACCGTACATTTGTGAGAGCTGGAGAAAAGTCAAGAGCCAAATCTTGAATAG 360  
|  
|  
|  
Db 324 ACCACCGTACATTTGTGAGAGCTGGAGAAAAGTCAAGAGCCAAATCTTGAATAG 383  
|  
|  
|  
QY 361 AAGATCGAAGGCGCCATCATGAGAACATTTGGTGGCTGGTTCAAAATGTCCCC 419  
|  
|  
|  
Db 384 AAGATCGAAGGCGCCATCATGAGAACATTTGGTGGCTGGTTCAAAATGTCCCC 442  
|  
|  
|

## RESULT 2

US-10-227-195A-1  
; Sequence 1, Application US/10227195A  
; Publication No. US20030077633A1  
; GENERAL INFORMATION:  
; APPLICANT: Cox, David  
; APPLICANT: Arnold, Deana  
; TITLE OF INVENTION: Haplotype structure of chromosome 21  
; FILE REFERENCE: 103001  
; CURRENT APPLICATION NUMBER: US/10/227,195A  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 113604  
; TYPE: DNA  
; ORGANISM: Human  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: 7175, 7204, 36972, 66372, 76921, 81512, 88727  
; OTHER INFORMATION: n = G or C  
US-10-227-195A-1

Query Match 100.0%; Score 419; DB 14; Length 113604;  
Best Local Similarity 100.0%; Pred. No. 1e-125;  
Matches 419; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CTTAACCCTTGTGCGCTATTTTATTTAATTGACAGAGGAAAGCATGTACTT 60  
|  
|  
|  
Db 17426 CTTAACCCTTGTGCGCTATTTTATTTAATTGACAGAGGAAAGCATGTACTT 17485  
|  
|  
|  
QY 61 TATCCAAATTCACACAGACGCTGGAAGCGTCTCCGAAGATTTTACTTATATG 120  
|  
|  
|  
Db 17486 TATCCAAATTCACACAGACGCTGGAAGCGTCTCCGAAGATTTTACTTATATG 17545  
|  
|  
|  
QY 121 ACAATTGGCGCCAGAACACACAGCTGAGCAAGAGCGCTCCAAAGCCAAAGTTGATGCTG 180  
|  
|  
|  
Db 17546 ACAATTGGCGCCAGAACACACAGCTGAGCAAGAGCGCTCCAAAGCCAAAGTTGATGCTG 17605  
|  
|  
|  
QY 181 AGAATTCTTACTATGTATCTCTGTAACCTCATGTGTGATGATTTGAAATCTCTTTATCTCA 240  
|  
|  
|  
Db 17606 AGAATTCTTACTATGTATCTCTGTAACCTCATGTGTGATGATTTGAAATCTCTTTATCTCA 17665  
|  
|  
|  
QY 241 TCGTGCCATCTGTGAGACATGTGAATCCAGAGACGGAACTCTCAATGACCCCT 300  
|  
|  
|  
Db 17666 TCGTGCCATCTGTGAGACATGTGAATCCAGAGACGGAACTCTCAATGACCCCT 17725  
|  
|  
|  
QY 301 ACCACCGTACATTTGTGAGAGCTGGAGAAAAGTCAAGAGCCAAATCTTGAATAG 360  
|  
|  
|  
Db 17726 ACCACCGTACATTTGTGAGAGCTGGAGAAAAGTCAAGAGCCAAATCTTGAATAG 17785  
|  
|  
|  
QY 361 AAGATCGAAGGCGCCATCATGAGAACATTTGGTGGCTGGTTCAAAATGTCCCC 419  
|  
|  
|  
Db 17786 AAGATCGAAGGCGCCATCATGAGAACATTTGGTGGCTGGTTCAAAATGTCCCC 17844  
|  
|  
|

RESULT 3  
US-10-227-195A-2  
; Sequence 2, Application US/10227195A  
; Publication No. US20030077633A1

; GENERAL INFORMATION:  
; APPLICANT: Cox, David  
; APPLICANT: Arnold, Deana  
; TITLE OF INVENTION: Haplotype structure of chromosome 21  
; FILE REFERENCE: 103001  
; CURRENT APPLICATION NUMBER: US/10/227,195A  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 113604  
; TYPE: DNA  
; ORGANISM: Human  
US-10-227-195A-2

Query Match 100.0%; Score 419; DB 14; Length 113604;  
Best Local Similarity 100.0%; Pred. No. 1e-125;  
Matches 419; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CTTAACCCTTGTGCGCTATTTTATTTAATTGACAGAGGAAAGCATGTACTT 60  
|  
|  
|  
Db 17426 CTTAACCCTTGTGCGCTATTTTATTTAATTGACAGAGGAAAGCATGTACTT 17485  
|  
|  
|  
QY 61 TATCCAAATTCACACAGACGCTGGAAGCGTCTCCGAAGATTTTACTTATATG 120  
|  
|  
|  
Db 17486 TATCCAAATTCACACAGACGCTGGAAGCGTCTCCGAAGATTTTACTTATATG 17545  
|  
|  
|  
QY 121 ACAATTGGCGCCAGAACACACAGCTGAGCAAGAGCGCTCCAAAGCCAAAGTTGATGCTG 180  
|  
|  
|  
Db 17546 ACAATTGGCGCCAGAACACACAGCTGAGCAAGAGCGCTCCAAAGCCAAAGTTGATGCTG 17605  
|  
|  
|  
QY 181 AGAATTCTTACTATGTATCTCTGTAACCTCATGTGTGATGATTTGAAATCTCTTTATCTCA 240  
|  
|  
|  
Db 17606 AGAATTCTTACTATGTATCTCTGTAACCTCATGTGTGATGATTTGAAATCTCTTTATCTCA 17665  
|  
|  
|  
QY 241 TCGTGCCATCTGTGAGACATGTGAATCCAGAGACGGAACTCTCAATGACCCCT 300  
|  
|  
|  
Db 17666 TCGTGCCATCTGTGAGACATGTGAATCCAGAGACGGAACTCTCAATGACCCCT 17725  
|  
|  
|  
QY 301 ACCACCGTACATTTGTGAGAGCTGGAGAAAAGTCAAGAGCCAAATCTTGAATAG 360  
|  
|  
|  
Db 17726 ACCACCGTACATTTGTGAGAGCTGGAGAAAAGTCAAGAGCCAAATCTTGAATAG 17785  
|  
|  
|  
QY 361 AAGATCGAAGGCGCCATCATGAGAACATTTGGTGGCTGGTTCAAAATGTCCCC 419  
|  
|  
|  
Db 17786 AAGATCGAAGGCGCCATCATGAGAACATTTGGTGGCTGGTTCAAAATGTCCCC 17844  
|  
|  
|

RESULT 4  
US-09-864-761-33139  
; Sequence 33139, Application US/09864761  
; Patent No. US20020048763A1  
; GENERAL INFORMATION:  
; APPLICANT: Penn, Sharon G.  
; APPLICANT: Rank, David R.  
; APPLICANT: Hanzel, David K.  
; APPLICANT: Chen, Wensheng  
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
; FILE REFERENCE: Aeomica-X-1  
; CURRENT APPLICATION NUMBER: US/09/864,761  
; PRIOR FILING DATE: 2001-05-23  
; PRIOR APPLICATION NUMBER: US 60/180,312  
; PRIOR FILING DATE: 2000-02-04  
; PRIOR APPLICATION NUMBER: US 60/207,456  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: US 09/632,366  
; PRIOR FILING DATE: 2000-08-03  
; PRIOR APPLICATION NUMBER: GB 24263.6  
; PRIOR FILING DATE: 2000-10-04  
; PRIOR APPLICATION NUMBER: US 60/236,359  
; PRIOR FILING DATE: 2000-09-27  
; PRIOR APPLICATION NUMBER: PCT/US01/00666

```

RESULT 5
US-09-864-761-3463
Sequence 3463, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharon G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aecm1ca-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24253.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30

```

```

; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 3463

```

```

? ORGANISM: Homo sapiens
? FEATURE:
? OTHER INFORMATION: MAP TO AP000052.1
? OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.1
? OTHER INFORMATION: EXPRESSED IN HELL100, SIGNAL = 1.1
? OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.3
? OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.92
? OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.4
? OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1
? OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.1
? OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.2
? OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.94
? OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.88
US-09-864-761-3463

Query Match      82.3%; Score 345; DB 9; Length 450;
Best Local Similarity 100.0%; Freq. No. 1e-102;
Matches 345; Conservative 0; Mismatches 0; Indels 0; Gaps 0

```

QY 1 CCTAACCTTGTGCTCTATTATTATTAAATTCAGACAGAGGAGAGATGCTCTT 60  
DB 106 CCTAACCTTGTGCTCTATTATTATTAAATTCAGACAGAGGAGAGATGCTCTT 165  
QY 61 TATTCATTTTCACACAGACCTGGAAGACCTCTCCAGAGATTTTATTACTTAATGG 120  
DB 166 TATTCATTTTCACACAGACCTGGAAGACCTCTCCAGAGATTTTATTACTTAATGG 225  
QY 121 ACAATTGGCCGACAAACACAGCTGAGCAGAGGCTCTCCAGGCAAGTTGATGCTG 180  
DB 226 ACAATTGGCCGACAAACACAGCTGAGCAGAGGCTCTCCAGGCAAGTTGATGCTG 285  
QY 181 AGAATCTTCTATATGTCATCTCTGACTCATGATGATGATGATGATGATGATGATG 240  
DB 286 AGAATCTTCTATATGTCATCTCTGACTCATGATGATGATGATGATGATGATGATG 345  
QY 241 TCGTGGCCTATCTGCTGATGACATCTGTAAATTCAGAGAGGCAATCTCCATGACCCCT 300  
DB 346 TCGTGGCCTATCTGCTGATGACATCTGTAAATTCAGAGAGGCAATCTCCATGACCCCT 405  
QY 301 ACCACGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 345  
DB 406 ACCACGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 450

RESULT 6  
US-09-864-761-20233  
Sequence 20233, Application US/09864761  
Patient No. US20020048763A1  
GENERAL INFORMATION:  
APPLICANT: Penn, Sharon G.  
APPLICANT: Rank, David R.  
APPLICANT: Hanzel, David K.  
APPLICANT: Chen, Wensheng  
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
FILE REFERENCE: Aeomica-X-1  
CURRENT APPLICATION NUMBER: US/09/864,761  
CURRENT FILING DATE: 2001-05-23  
PRIOR APPLICATION NUMBER: US 60/180,312  
PRIOR FILING DATE: 2000-02-04  
PRIOR APPLICATION NUMBER: US 60/207,456  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: US 09/632,366  
PRIOR FILING DATE: 2000-08-03  
PRIOR APPLICATION NUMBER: GB 24263,6  
PRIOR FILING DATE: 2000-10-04  
PRIOR APPLICATION NUMBER: US 60/236,359  
PRIOR FILING DATE: 2000-09-27  
PRIOR APPLICATION NUMBER: PCT/US01/00666  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00667  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00664  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00669  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00665  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00668  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00663  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00662  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00661  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00670  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: US 60/234,687  
PRIOR FILING DATE: 2000-09-21  
PRIOR APPLICATION NUMBER: US 09/608,408

PRIOR FILING DATE: 2000-06-30  
PRIOR APPLICATION NUMBER: US 09/774,203  
PRIOR FILING DATE: 2001-01-29  
NUMBER OF SEQ ID NOS: 49117  
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1  
SEQ ID NO 20233  
LENGTH: 312  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
OTHER INFORMATION: MAP TO AP000052.1  
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.1  
OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 1.1  
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.3  
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.92  
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.4  
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1  
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.1  
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.2  
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.94  
OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.88  
OTHER INFORMATION: EST HUMAN HIT: A1246239.1, EVALUATE 0.00e+00  
OTHER INFORMATION: SWISSPROT HIT: Q9Y606, EVALUATE 3.00e-55  
OTHER INFORMATION: NT HIT: AF302095.1, EVALUATE 0.00e+00  
US-09-864-761-20233

Query Match 74.5%; Score 312; DB 9; Length 312;  
Best Local Similarity 100.0%; Pred. No. 5.6e-92;  
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 104 TTTTATTCTTATATGACAAATTTGGCCAGAACACAGAGCTGACCAAGGCTCTCA 163  
DB 1 TTTTATTCTTATATGACAAATTTGGCCAGAACACAGAGCTGACCAAGGCTCTCA 60  
QY 164 AGCCAAAGTGAATGCTGAGAACTTCTATATGATCTCTGATCTGATGATGATG 223  
DB 61 AGCCAAAGTGAATGCTGAGAACTTCTATATGATCTCTGATCTGATGATGATG 120  
QY 224 AATGTTCTCTTTCATCATGCTGAGCACTCTGAGACACTGTGAATTCAGAGAGGCA 283  
DB 121 AATGTTCTCTTTCATCATGCTGAGCACTCTGAGACACTGTGAATTCAGAGAGGCA 180  
QY 284 ACACTCAATGACCCCTACCACTGATCTGTGAGAGCTGCGAGAGAAAGTACAAG 343  
DB 181 ACACTCAATGACCCCTACCACTGATCTGTGAGAGCTGCGAGAGAAAGTACAAG 240  
QY 344 CCAATCTTGAATCTGAGAAATTCAGAGCCCACTCATGAGAACTGTCGCTG 403  
DB 241 CCAATCTTGAATCTGAGAAATTCAGAGCCCACTCATGAGAACTGTCGCTG 300  
QY 404 GTTCAAAATGTC 415  
DB 301 GTTCAAAATGTC 312

RESULT 7  
US-09-864-761-16671  
Sequence 16671, Application US/09864761  
Patient No. US20020048763A1  
GENERAL INFORMATION:  
APPLICANT: Penn, Sharon G.  
APPLICANT: Rank, David R.  
APPLICANT: Hanzel, David K.  
APPLICANT: Chen, Wensheng  
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
FILE REFERENCE: Aeomica-X-1  
CURRENT APPLICATION NUMBER: US/09/864,761  
CURRENT FILING DATE: 2001-05-23  
PRIOR APPLICATION NUMBER: US 60/180,312  
PRIOR FILING DATE: 2000-02-04  
PRIOR APPLICATION NUMBER: US 60/207,456  
PRIOR FILING DATE: 2000-05-26

[illegible]

```

APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aecomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIORITY APPLICATION NUMBER: US 60/180,312
PRIORITY FILING DATE: 2000-02-04
PRIORITY APPLICATION NUMBER: US 60/207,456
PRIORITY FILING DATE: 2000-05-26
PRIORITY APPLICATION NUMBER: US 09/632,366
PRIORITY FILING DATE: 2000-08-03
PRIORITY APPLICATION NUMBER: GB 24263.6
PRIORITY FILING DATE: 2000-10-04
PRIORITY APPLICATION NUMBER: US 60/236,359
PRIORITY FILING DATE: 2000-09-27
PRIORITY APPLICATION NUMBER: PCT/US01/00666
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00667
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00664
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00669
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00665
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00668
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00663

```

```

1  PRIOR FILING DATE: 2001-01-30
2  PRIOR APPLICATION NUMBER: PCT/US01/00662
3  PRIOR FILING DATE: 2001-01-30
4  PRIOR APPLICATION NUMBER: PCT/US01/00661
5  PRIOR FILING DATE: 2001-01-30
6  PRIOR APPLICATION NUMBER: PCT/US01/00670
7  PRIOR FILING DATE: 2001-01-30
8  PRIOR APPLICATION NUMBER: US 60/234,687
9  PRIOR FILING DATE: 2000-09-21
10 PRIOR APPLICATION NUMBER: US 09/608,408
11 PRIOR FILING DATE: 2000-06-30
12 PRIOR APPLICATION NUMBER: US 09/774,203
13 PRIOR FILING DATE: 2001-01-29
14 NUMBER OF SEQ ID NOS: 49117
15 SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
16 SEQ ID NO 20783
17 LENGTH: 231
18 TYPE: DNA
19 ORGANISM: Homo sapiens
20 FEATURE:
21 OTHER INFORMATION: MAP TO AP000121.1
22 OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.1
23 OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.94
24 OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.59
25 OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.74
26 OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.66
27 OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.66
28 OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.7
29 OTHER INFORMATION: SWISSPROT HIT: P15382, EVALU2 2.00e-39
30 OTHER INFORMATION: BST_HUMAN HIT: A06472/5.1, EVALU5 5.60e-01
31 US-09-854-761-20783

```

	Query Match	12.7%	Score 53.2	DB 9	Length 231
	Best Local Similarity	63.6%	Pred. No. 4.6e-07		
	Matches	98	Conservative	0	Mismatches 53; Indels 3; Gaps 1
QY	200	CCTGTACTCATTGGTATGATTTGGAAATGTTCTCTTTCATCATCTGGCCATCTGTGATG	259		
Db	207	CCTCTAGCTCTCATGTGTAAGGATCTTGGGCTTCTTCAACCTGGGCATCATCTGATG	148		
QY	260	CACGTGAAATTCACAAGACGGGAACTCTCAATGACCCCTTACCAACGTAATG---T	316		
Db	147	CTATACCGCTCCCAAGAGCTGGAGCACTCCAAAGCAACCATTTCAACGTCTACATGAGTC	88		
QY	317	AGAGACCTGGCAGAGAAAAGTACCAAGGCCAATTC	350		
Db	87	CGATGCTCTGGCAAGAAAGCAAGAGGCTTATGTC	54		

```

RESULT 10
US-09-864-761-17593/C
Sequence 17593, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharon G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OR INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aeomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359

```

```

1  PRIOR FILING DATE: 2000-09-27
2  PRIOR APPLICATION NUMBER: PCT/US01/00666
3  PRIOR FILING DATE: 2001-01-30
4  PRIOR APPLICATION NUMBER: PCT/US01/00667
5  PRIOR FILING DATE: 2001-01-30
6  PRIOR APPLICATION NUMBER: PCT/US01/00668
7  PRIOR FILING DATE: 2001-01-30
8  PRIOR APPLICATION NUMBER: PCT/US01/00669
9  PRIOR FILING DATE: 2001-01-30
10 PRIOR APPLICATION NUMBER: PCT/US01/00665
11 PRIOR FILING DATE: 2001-01-30
12 PRIOR APPLICATION NUMBER: PCT/US01/00668
13 PRIOR FILING DATE: 2001-01-30
14 PRIOR APPLICATION NUMBER: PCT/US01/00663
15 PRIOR FILING DATE: 2001-01-30
16 PRIOR APPLICATION NUMBER: PCT/US01/00662
17 PRIOR FILING DATE: 2001-01-30
18 PRIOR APPLICATION NUMBER: PCT/US01/00661
19 PRIOR FILING DATE: 2001-01-30
20 PRIOR APPLICATION NUMBER: PCT/US01/00670
21 PRIOR FILING DATE: 2001-01-30
22 PRIOR APPLICATION NUMBER: US 60/234,687
23 PRIOR FILING DATE: 2000-09-21
24 PRIOR APPLICATION NUMBER: US 09/608,408
25 PRIOR FILING DATE: 2000-06-30
26 PRIOR APPLICATION NUMBER: US 09/774,203
27 PRIOR FILING DATE: 2001-01-29
28 NUMBER OF SEQ ID NOS: 49117
29 SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
30 SEQ ID NO 17593
31 LENGTH: 390
32 TYPE: DNA
33 ORGANISM: Homo sapiens
34 FEATURE:
35 OTHER INFORMATION: MAP TO AP000168.1
36 OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 2.6
37 OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 3.6
38 OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 3.9
39 OTHER INFORMATION: EXPRESSED IN B1474, SIGNAL = 2.4
40 OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.8
41 OTHER INFORMATION: EXPRESSED IN HEL100, SIGNAL = 1.8
42 OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 2.8
43 OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1.8
44 OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 2.3
45 OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 3.2
46 OTHER INFORMATION: EST HUMAN HIT: AA170188.1, EVALUE 6.30e-02
47 OTHER INFORMATION: SWISSPROT HIT: P15382, EVALUE 4.00e-61
48 OTHER INFORMATION: NT HIT: g11526222, EVALUE 0.00e+00
49 US-09-864 -761-17593

```

```

Query Match      12.7%; Score 53.2; DB 9; Length 390;
Best Local Similarity 63.6%; Pred. No. 6.1e-07;
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1

QY      200 CCTGTACTCCTAATGAGTGAATTGAAAGTTTCCTTTTCATCATCGTGCCATCTGTGTAG 259
        |||||
Db       209 CCTTAGCTCTCATGTGTACTGGGATTTCTGGCTTTCACTCCCTGGGCATCATGCTGAG 150
        |||||

QY      260 CACTGTGAAATCCAAGAGACGGGAAACACTCAATGACCCTTACCAACAGTACATTG---T 316
        |||||
Db       149 CTACATCCGCTCCAAGAAGCTGGAGCACTGSAAGAACCCATTCAAACGTCTCATGTGAATC 90
        |||||

QY      317 AGAGAACTGGCAGGAAAAGTACAAAGGCCAAATC 350
        |||||
Db       89 CGATGCTCTGGCMAAGAAAGACAAGGCGCTATGTC 56
        |||||

RESULT 11
US-10-224-683-4
; Sequence 4, Application US/10224683
; Publication No. US20030162192A1
; GENERAL INFORMATION:
; APPLICANT: Sotcos, John
```

APPLICANT: Rlenhoff, Jr., Hugh  
 APPLICANT: Guida, Marco  
 APPLICANT: Curran, Mark  
 TITLE OP INVENTION: Polymorphisms Associated with Ion-Channel Diseases  
 FILE REFERENCE: 4389-33  
 CURRENT APPLICATION NUMBER: US/10/0224,663  
 CURRENT FILING DATE: 2002-01-06  
 PRIOR APPLICATION NUMBER: 60/314,331  
 PRIOR FILING DATE: 2001-08-20  
 PRIOR APPLICATION NUMBER: 60/378,521  
 PRIOR FILING DATE: 2002-05-06  
 NUMBER OF SEQ ID NOS: 185  
 SOFTWARE: PatentIn version 3.1  
 SEQ ID NO 4  
 LENGTH: 390  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-10-224-663-4

Query Match	12.7%	Score 53.2	DB 12	length 390
Best Local Similarity	63.6%	Pred No. 6.1e-07		
Matches	98	Mismatches	53	Indels 3
				Gaps 1

**Oy**    200    CCTGACCCATGGATGAGTGAATGTCTCTTCATCAACGTGGGCATCCTGGGAG    259  
        132    CCTTACGTCCTCATGTAAGTACTGGGATTCCTTGCGCTTCCTACCCTGGGCATCATGCTGAG    191  
**Db**

Oy      260 CACTGTGAAATCCAGAGA CGGGACA CTCCA TGA CCCCTAC CACCAGTACATTG---T 316  
         | | | | | | | | | | | | | | | | | | | | | |  
Db      192 CTACATCCGCCTCAAGAAC GCGAGCA CTCGA AGC A CC CATTC AAC GTCTAC ATCGAGT TC 251

Oy	317	AGAGACTGCGAGAAAAGTACAAGAGCCAAATC	350
Db	252	CGATGCTGCGCAGAGAGGACAAGGCTATGTG	285

RESULT 12 US-10-260-861-1

Sequence 1, Application US/10260861

Publication No. US20030108924A1

GENERAL INFORMATION:

APPLICANT: George Jr., Alfred L.

APPLICANT: Roden, Dan M

TITLE OF INVENTION: METHOD OF SCREENING FOR SUSCEPTIBILITY TO

TITLE OF INVENTION: DRUG-INDUCED CARDIAC ARRYTHMIA

FILE REFERENCE: Attorney Docket No. US20030108924A1 1242-33-2

CURRENT APPLICATION NUMBER: US/10/260,861

CURRENT FILING DATE: 2002-09-30

PRIOR APPLICATION NUMBER: 60/158,696

PRIOR FILING DATE: 1999-10-08

NUMBER OF SEQ ID NOS: 11

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 1

```

? TYPE: DNA
? ORGANISM: Homo sapiens
? FEATURE:
? NAME/KEY: CDS
? LOCATION: (29)..(418)
? PUBLICATION INFORMATION:
? JOURNAL: Biochem. Biophys. Res. Commun.
? VOLUME: 161
? PAGES: 176-181
? DATE: May-1989
? DATABASE ACCESSION NUMBER: GenBank M26685
? DATABASE ENTRY DATE: 1994-03-30
? JS-10-260-861-1

```

Query Match	12.7%	Score 53.2	DB 14	Length 436
Best Local Similarity	63.6%	Pred. No. 6.5e-07		
Matches 98	Conservative 0	Mismatches 53	Indels 3	Gaps 1

200 CCTGACCTCATGATGATTCGAAATGTTCTTCCTTTCATCATCATGTCAGCCATCCTGGTAG 259

Db 160 CCTCTACGCTCCATNGTACTGGGATTCCTGCGTTCCTACCCCTGGGCATCATGCTGAG 219  
 260 CACTGTGAATTCGAAGACGGGAACATCTCCATGACCCTTACCAACAGTACATTG---T 316  
 QY, <sup>5</sup> 220 CTACATCGGCTCCAGGAAGCTGGAGCACTCCAGAGACCATTCAACGTCTACATCGAGTC 279  
 Db 317 AGAGGACTGCGCAGAAAAGTACAAAGAGCCAAATC 350  
 280 CGATGCTCTGGCAAGGAGGACCAAGGCGCTATGTC 313

RESULT 13  
US-10-101-510-498  
Communication HC/10101510

```

? PUBLICATION NO.: US20030148295A1
? GENERAL INFORMATION:
? APPLICANT: WAN, JACKSON
? APPLICANT: WANG, YIXIN
? TITLE OF INVENTION: EXPRESSION PROFILES AND METHODS OF USE
? FILE REFERENCE: 15117.0012
? CURRENT APPLICATION NUMBER: US/10/101.510
? CURRENT FILING DATE: 2002-03-20
? PRIOR APPLICATION NUMBER: 60/276,947
? PRIOR FILING DATE: 2001-03-20
? NUMBER OF SEQ ID NOS: 805
? SOFTWARE: Patentin Ver. 2.1
? SEQ ID NO 498
? LENGTH: 949
? TYPE: DNA
? ORGANISM: Homo sapiens
US-10-101-510-498

```

Query Match	12.7%	Score	53.2	DB	12	Length	949
Best Local Similarity	63.6%	Pred. No. 1e-06					
Matches 98; Conservative	0	Mismatches	53	Indels	3	Gaps	1

Dy      200 CCTGTACCTCATGCGTGAATGGATTGTCCTTTTCATCATCGTGCCATCCTGGTAG 259  
      |||||  
Db      673 CCTGTACCTCCTCATGTACTGGGATTCTTCGGCTCTTCAACCCTGGGCATCATGCTGAG 732

QY            260 CACTGTGAATCCAGAGACGGGACACTTCCAATGACCCTACCAACAGTCATTG---T 316  
| | | | | | | | | | | | | | | | | | | | | |  
Db         733 CTACATCCGCCTCAAGAAGCTGAGACACTTGAAACAACCATTTCAAGCTCTACATCGAGTC 792

QY	317	AGAGACTGCAGAAAAAGTACAAGAGCCAAATC	350
Db	793	CGATGCCCTGGCAAGAGAACAGCAAGGCTTATGTC	826

RESULT 14  
US-10-224-683-5  
: Sequence 5, Application US/10224683

GENERAL INFORMATION:  
 APPLICANT: Sotos, John  
 APPLICANT: Rienhoff, Jr., Hugh  
 APPLICANT: Guida, Marco  
 APPLICANT: Curran, Mark  
 TITLE OF INVENTION: Polymorphisms Associated with Ion-Channel Disease  
 FILE REFERENCE: 4369-33  
 CURRENT APPLICATION NUMBER: US/0-224,683  
 CURRENT FILING DATE: 2002-01-06  
 PRIOR APPLICATION NUMBER: 60/314,331  
 PRIOR FILING DATE: 2001-08-20  
 PRIOR APPLICATION NUMBER: 60/378,521  
 PRIOR FILING DATE: 2002-05-06  
 NUMBER OF SEQ ID NOS: 185  
 SOFTWARE: PatentIn version 3.1  
 SEQ ID NO 5  
 LENGTH: 1200  
 TYPE: DNA  
 ORGANISM: Homo sapiens

US-10-224-683-5

Query Match 12.7%; Score 53.2; DB 12; Length 1200;  
Best Local Similarity 63.6%; Pred. No. 1; 1e-06;  
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1;

QY 200 CCTGTACCTCAGTGTGATGATGGAATGTTCTTTTCATCATCGTGCCATCTGTGTAG 259  
DB 550 CCTCTACGCTCTCATGTGATGAGGATTCCTTGCGCTTCTTCACTCGGGCATCATGTGAG 609

QY 260 CACTGTGAATCCAGAGACGGGAACCTCCATGACCCCTACCAACCATCATG---T 316  
DB 610 CTACATCCGCTCCAGAGCTGGAGCACTGGAACGACCCATTCACGTTACATGAGTC 669

QY 317 AGAGACTGGCAGGAAAGTACAGACCAATC 350  
DB 670 CGATGCTGGCAGAGAGACAGAGCGCTATGTC 703

RESULT 15

US-10-368-643-3  
Sequence 3, Application US/10368643  
Publication No. US20030170708A1

GENERAL INFORMATION:  
APPLICANT: Keating, Mark T.  
APPLICANT: Sanguinetti, Michael C.  
APPLICANT: Curran, Mark E.  
APPLICANT: Landes, Gregory M.  
APPLICANT: Conners, Timothy D.  
APPLICANT: Burn, Timothy C.  
APPLICANT: Spławski, Igor  
TITLE OF INVENTION: KVLQ1 - A LONG QT SYNDROME GENE  
FILE REFERENCE: 2323-163  
CURRENT APPLICATION NUMBER: US/10/368, 643  
CURRENT FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: US 09/597,731  
PRIOR FILING DATE: 2000-06-19  
PRIOR APPLICATION NUMBER: US 09/135,010  
PRIOR FILING DATE: 1998-08-17  
PRIOR APPLICATION NUMBER: US 60/094,477  
PRIOR FILING DATE: 1998-07-29  
PRIOR APPLICATION NUMBER: US 08/921,068  
PRIOR FILING DATE: 1997-08-29  
PRIOR APPLICATION NUMBER: US 08/739,383  
PRIOR FILING DATE: 1996-10-29  
PRIOR APPLICATION NUMBER: US 60/019,014  
PRIOR FILING DATE: 1995-12-22  
NUMBER OF SEQ ID NOS: 116  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 3  
LENGTH: 1703

TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (193)..(579)  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (1)..(1703)  
OTHER INFORMATION: n may be any base  
US-10-368-643-3

Query Match 12.7%; Score 53.2; DB 12; Length 1703;  
Best Local Similarity 63.6%; Pred. No. 1; 4e-06;  
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1;

QY 200 CCTGTACCTCAGTGTGATGATGGAATGTTCTTTTCATCATCGTGCCATCTGTGTAG 259  
DB 324 CCTCTACGCTCTCATGTGATGAGGATTCCTTGCGCTTCTTCACTCGGGCATCATGTGAG 383

QY 260 CACTGTGAATCCAGAGACGGGAACCTCCATGACCCCTACCAACCATCATG---T 316  
DB 384 CTACATCCGCTCCAGAGCTGGAGCACTGGAACGACCCATTCACGTTACATGAGTC 443

QY 317 AGAGACTGGCAGGAAAGTACAGACCAATC 350  
DB 444 CGATGCTGGCAGAGAGACAGAGCGCTATGTC 477

Search completed: October 31, 2003, 05:22:44  
Job time: 468.46 secs



GenCore version 5.1.6  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 31, 2003, 02:39:38 ; Search time 30.9427 Seconds  
(without alignments)  
5976.847 Million cell updates/sec

Title: US-09-550-163-1\_COPY\_24\_442  
Perfect score: 419  
Sequence: 1 cctaactgttcgcctactt.....ctgggtccaatgcccc 419

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Listing first 45 summaries

Database :

1: Issued Patents NA:\*  
2: /cgn2\_6/prodata/2/ina/5A\_COMB.seq:\*  
3: /cgn2\_6/prodata/2/ina/6A\_COMB.seq:\*  
4: /cgn2\_6/prodata/2/ina/6B\_COMB.seq:\*  
5: /cgn2\_6/prodata/2/ina/PC/US\_COMB.seq:\*  
6: /cgn2\_6/prodata/2/ina/backfillseq1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	53.2	12.7	398	1 US-08-118-101A-5	Sequence 5, Appl1
2	53.2	12.7	436	4 US-09-679-185-1	Sequence 1, Appl1
3	53.2	12.7	1703	3 US-09-135-021-77	Sequence 77, Appl1
4	53.2	12.7	1703	3 US-09-135-020-3	Sequence 3, Appl1
5	53.2	12.7	1703	3 US-09-135-010A-3	Sequence 3, Appl1
6	53.2	12.7	1703	4 US-09-444-871-3	Sequence 3, Appl1
7	53.2	12.7	1703	4 US-09-597-735-3	Sequence 3, Appl1
8	53.2	12.7	1703	4 US-09-444-295-3	Sequence 3, Appl1
9	53.2	12.7	1703	4 US-09-597-732-3	Sequence 3, Appl1
10	53.2	12.7	1703	4 US-09-597-731-3	Sequence 3, Appl1
11	51.6	12.3	436	4 US-09-679-185-3	Sequence 3, Appl1
12	36.6	8.7	2652	1 US-08-318-831-1	Sequence 1, Appl1
13	36.6	8.6	1335	4 US-09-016-434-1360	Sequence 1360, Ap
14	36.6	8.6	1380	1 US-08-110-286A-1	Sequence 1, Appl1
15	36.6	8.6	1495	4 US-08-482-746-1	Sequence 1, Appl1
16	36.6	8.6	1495	4 US-09-580-734-1	Sequence 1, Appl1
17	36.6	8.6	1495	4 US-08-374-009-1	Sequence 1, Appl1
18	36.6	8.6	1582	4 US-08-482-746-14	Sequence 14, Appl1
19	36.6	8.6	1582	4 US-09-580-734-14	Sequence 14, Appl1
20	36.6	8.6	1582	4 US-08-374-009-14	Sequence 14, Appl1
21	33.6	8.0	645	4 US-09-069-896-2	Sequence 2, Appl1
22	33.6	8.0	645	4 US-09-471-468-2	Sequence 2, Appl1
23	33.4	8.0	4104	4 US-09-996-243-277	Sequence 277, App
24	33.4	7.9	606	3 US-09-328-111-133	Sequence 133, App
25	33.4	7.9	2912	4 US-09-307-143-3	Sequence 303, App
26	32.4	7.7	837	3 US-08-998-416-303	Sequence 823, App
27	32.4	7.7	4659	4 US-09-221-017B-823	

C 28	31.6	7.5	1664976	4 US-08-916-421B-1	Sequence 1, Appl1
C 29	31.2	7.4	2450	4 US-09-620-312D-336	Sequence 336, App
C 30	31.2	7.4	2513	4 US-09-620-312D-337	Sequence 337, App
C 31	31	7.4	2049	4 US-09-252-991A-6426	Sequence 6426, Ap
C 32	30.8	7.4	7489	4 US-09-674-677-5	Sequence 5, Appl1
C 33	30.6	7.3	744	3 US-08-969-644-17	Sequence 17, Appl1
C 34	30.6	7.3	744	3 US-08-444-189-17	Sequence 17, Appl1
C 35	30.6	7.3	744	3 US-08-468-544-17	Sequence 254, Appl1
C 36	30.6	7.3	1053	4 US-09-996-243-254	Sequence 252, App
C 37	30.6	7.3	1076	4 US-09-996-243-252	Sequence 3, Appl1
C 38	30.6	7.3	6822	4 US-09-426-998-3	Sequence 6, Appl1
C 39	30.6	7.3	7502	3 US-08-969-644-6	Sequence 6, Appl1
C 40	30.6	7.3	7502	3 US-08-444-189-6	Sequence 6, Appl1
C 41	30.6	7.3	7502	3 US-08-468-544-6	Sequence 4, Appl1
C 42	30.6	7.3	7741	4 US-09-426-998-4	Sequence 2063, Ap
C 43	30.4	7.3	498	4 US-09-252-991A-2063	Sequence 16195, A
C 44	30.4	7.3	1047	4 US-09-252-991A-16195	Sequence 2139, Ap
C 45	30.4	7.3	1317	4 US-09-252-991A-2139	

#### ALIGNMENTS

RESULT 1

US-08-118-101A-5  
; Sequence 5, Application US/08118101A

; Patent No. 5620892

; GENERAL INFORMATION:

; APPLICANT: Knitz, Stephen E.

; APPLICANT: Knickerbocker, Aton M.

; TITLE OF INVENTION: A STRAIN OF SACCAROMYCES CEREVISIAE

; TITLE OF INVENTION: EXPRESSING THE GENE ENCODING POTASSIUM TRANSPORTER MINK

; NUMBER OF SEQUENCES: 16

; CORRESPONDENCE ADDRESS:

; ADDRESSER: Burton Rodney

; STREET: P.O. Box 4000

; CITY: Princeton

; STATE: New Jersey

; COUNTRY: U.S.A.

; ZIP: 08543-4000

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/118.101A

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: Gaul, Timothy J.

; REGISTRATION NUMBER: 33,111

; REFERENCE/DOCKET NUMBER: DC27

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (609) 252-5901

; TELEFAX: (609) 252-4526

; INFORMATION FOR SEQ ID NO: 5:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 398 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: CDNA

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..398

; US-08-118-101A-5

Query Match 12.7%; Score 53.2; DB 1; Length 398;  
Best Local Similarity 63.6%; Pred. No. 3.2e-08;  
Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1;

Oy	200	CCGTAACCTGATGATGATGATGAAATGTTCTCTTCAATCAATCGAGGCAATCCGAGAG	255
	141	CCCTTAAGTCTATAGTAAGTGAATCTTGGGCTTTCTACACCTCGGCAATCAATGCTGAG	200
Oy	260	CACGTGAAATCCAAGAGACGGGAACTCCATGACCCGCAACCAAGTACATTG---T	316
Db	201	CTACATCCGTTCCAAAGAGCTGGAGCACTCGAACGACCATTCAACGTCTACATGAGTC	260
Oy	317	AGAGACTGGCAGAGAAAGTACAAAGCCAAATC	350
Db	261	CGATGCTGSCAAGAGAGCAAGGCTTATGTC	294

RESULT 2  
US-09-679-185-1

Patent No. 6458542  
GENERAL INFORMATION:  
APPLICANT: George Jr., Alfred L.  
APPLICANT: Roden, Dan M  
TITLE OF INVENTION: METHOD OF SCREENING FOR SUSCEPTILITY TO  
TITLE OF INVENTION: DRUG-INDUCED CARDIAC ARRYTHMIA  
FILE REFERENCE: Attorney Docket No. 6458542 1242-33-2  
CURRENT APPLICATION NUMBER: US/09/679,185  
CURRENT FILING DATE: 2000-10-04  
PRIOR APPLICATION NUMBER: 60/158,696  
PRIOR FILING DATE: 1999-10-08  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 1  
LENGTH: 436  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (29)..(418)  
PUBLICATION INFORMATION:  
JOURNAL: Biochem. Biophys. Res. Commun.  
VOLUME: 161  
PAGES: 176-181  
DATE: MAY-1989  
DATABASE ACCESSION NUMBER: GenBank M26685  
DATABASE ENTRY DATE: 1994-03-30  
US-09-679-185-1

Query Match	12.7%	Score 53.2	DB 4	Length 436
Best Local Similarity	63.6%	Pred. No. 3.4e-08		
Matches	98	Conservative 0	Mismatches 53	Indels 3
			Gaps 1	
Qy	200	CCTGTACCTCAGTGATGATGTGAAATGTCCTTTTCATTCATCGTGCCATCTGTGTG	259	
Db	160	CCTGTACCTCCTCAATGATGATCTGGGATCTTTGGGCTTTTCAACCCGTGGCATATCTGTG	219	
Qy	260	CACGTGAAATTCGAAGACGGGAACACTCCATATGACCCCTTACCAACCAATCATTTG---T	316	
Db	220	CTACATCCGCTTCGAAGACTGGAGCACTCGAACCAACCCATTCACATCTCATATGATGATC	279	
Qy	317	AGAGGACTGGCAGGAAAGTACAAAGGCCAATC	350	
Db	280	CGATGCTCTGGCAAGAAAGACAAAGCCCTATGTC	313	

RESULT 3  
US-09-135-021-77  
; Sequence 77, Application US/09135021A

1 GENERAL INFORMATION:  
 2 APPLICANT: Splawski, Igor  
 3 APPLICANT: Keating, Mark T.  
 4 TITLE OF INVENTION: A HOMOCYGOUS MUTATION IN KVLQ1 WHICH CAUSES JERVELL  
 5 TITLE OF INVENTION: AND LANGE-NIELSEN SYNDROME  
 6 FILE REFERENCE: 2223-128  
 7 CURRENT APPLICATION NUMBER: US/09/135,021A

```

: CURRENT FILING DATE: 1998-08-17
: EARLIER APPLICATION NUMBER: 08/874,655
: EARLIER FILING DATE: 1997-06-13
: EARLIER APPLICATION NUMBER: 60/094,477
: EARLIER FILING DATE: 1998-07-29
: NUMBER OF SEQ ID NOS: 80
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 77

```

LOCATION: (193) .. (579)  
US-09-135-021-77

Query Match	12.7%	Score 53.2;	DB 3;	Length 1703;
Best Local Similarity	63.6%	Pred. No. 7.6e-08;		
Matches 98;	Conservative 0;	Mismatches 53;	Indels 3;	Gaps 1

Oy	200	CCGTAACCCATGAGGATGATGGAATTCCTCTTATATATCGGGCAATCCGGTGAG	259
Db	324	CCTTAAGCTCTCATGTAAGTGGGATTTTGGGCTTCTTACCTCGGACATATGCTGAG	383
Oy	260	CACGTGGAATCCAGAGAGCGGGAACTCCATATGACCCCTACCAACGATACATTTG---T	316
Db	384	CTACATCCGCTCGAGAAAGCTGGAGCACTCGAAGACCCATTCAACGCTTACATCGAGTC	443
Oy	317	AGAGCACTGGACAGAAAAGTACAGAGGCCAATC	350
Db	444	CGATGCTTGGCAAGAGAAAGACAAAGGCTATGTC	477

RESULT 4  
US-09-135-020-3

```

/ Patent No.: 5274332
/ GENERAL INFORMATION:
/ APPLICANT: Keating, Mark T.
/ APPLICANT: Sanguinetti, Michael C.
/ APPLICANT: Sjlawski, Igor
/ TITLE OF INVENTION: MUTATIONS IN THE KCNE1 GENE ENCODING HUMAN MINK WHICH
/ TITLE OF INVENTION: CAUSE ARRHYTHMIA SUSCEPTIBILITY THEREBY ESTABLISHING
/ TITLE OF INVENTION: KCNE1 AS AN IQT GENE
/ FILE REFERENCE: 2323-131
/ CURRENT APPLICATION NUMBER: US/09/135,020
/ EARLIER FILING DATE: 1998-08-17
/ EARLIER APPLICATION NUMBER: 08/921,068
/ EARLIER FILING DATE: 1997-08-29
/ EARLIER APPLICATION NUMBER: 08/739,383
/ EARLIER FILING DATE: 1996-10-29
/ EARLIER APPLICATION NUMBER: 60/019,014
/ EARLIER FILING DATE: 1995-12-22
/ EARLIER APPLICATION NUMBER: 60/094,477
/ EARLIER FILING DATE: 1998-07-29
/ NUMBER OF SEQ ID NOS: 114
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 3
/ LENGTH: 1703
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (193)..(579)
/ US-09-135-020--3

```

Query Match 12.7% Score 53.2; DB 3 Length 1703;  
 Best Local Similarity 63.6%; Pred. No. 7,6e-08;  
 Matches 98; Conservative 0; Mismatches 53; Indels 3; Gaps 1

200 CCTGTAACCTCATGATGATGATGGAATGTTCTTTTCATCATCGTGCCATCCTGCGTAG 259  
 324 CCTGTAACCTCATGATGATGATGGAATGTTCTTTTCATCATCGTGCCATCCTGCGTAG 383





```

? PRIOR APPLICATION NUMBER: 08/921,068
? PRIOR FILING DATE: 1997-08-29
? PRIOR APPLICATION NUMBER: 08/739,353
? PRIOR FILING DATE: 1996-10-29
? PRIOR APPLICATION NUMBER: 60/019,014
? PRIOR FILING DATE: 1995-12-22
? NUMBER OF SEQ. ID NOS: 116
? SOFTWARE: PatentIn Ver. 2.0
? SEQ. ID NO. 3
? LENGTH: 1703
? TYPE: DNA
? ORGANISM: Homo sapiens
? FEATURE:
? NAME/KEY: CDS
? LOCATION: (133)..(579)
US-09-557-731-3

```

Query Match	12.7%	Score 53.2	DB 4	Length 1703
Best Local Similarity	63.6%	Pred. No. 7.6e-08		
Matches 98, Conservative		Mismatches 53	Indels 3	Gaps 1

Qy	200	CCGCTACCTCATTGGTGAATGATGATGCTTCTTTCATCATCGGGCCATCCGAGTAG	255
Db	324	CCCTACGCTCTCATGGTACTGGGATTCTTCGGCTTTTCAACCTGGGGATCATGCTGAG	383
Qy	260	CACGTGAATTCAGAGACGGGAAACACTCCAAATGACCCCTACCAACAGTACATTG---	316
Db	384	CTACATCCGCTCCAGAGACTGGAGCACTCGAACGACCATTCAAAGCTACATCGAGTC	443
Qy	317	AGAGAGCTGGCAGAGAAAGTACAGAGCCCAATC	350
Db	444	CGATGCTCGCAAGAGAGCAAGGCTATGTC	477

```

RESULT 11
US-09-679-185-3
Sequence 3, Application US/09679185
Patent No. 6458542
GENERAL INFORMATION:
APPLICANT: George Jr., Alfred L.
TITLE OF INVENTION: METHOD OF SCREENING FOR SUSCEPTIBILITY TO
TITLE OF INVENTION: DRUG-INDUCED CARDIAC ARTHYTHMIA
FILE REFERENCE: Attorney Docket No. 6458542 1242-33-2
CURRENT APPLICATION NUMBER: US/09/679,185
CURRENT FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: 60/158,696
PRIOR FILING DATE: 1999-10-08
NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 436
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (29)..(418)
US-09-679-185-3

```

Query Match	12.3%	Score	51.6	DB	4	Length	436
Best Local Similarity	63.0%	Pred	No.1.2e-07				
Matches	97	Conservative	0	Mismatches	54	Indels	3
						Gaps	1

Qy	200	CCGTAACCTCATGGTATGATGGAAAGTTCTTCTTTCATCAACGGAGGCAATCCGGTAG	255
	160	CCTCTACAGTCTCATGTACTGAGATTCTCCGGCTTCTTCAACCTGGGACATATGCTGAG	215
Qy	260	CACGTGCAAAATCCAGAGACGGGAACTCTCCAAATGCCCAACGATCATTTG---T	316
Db	220	CTACATCCGCTCCAGAGAGCTGGAGCACTCGAACGCCATTCATACGTCATATCGATGC	279
Qy	317	AGAGACTGGCAGGAAAGTACAGAGCCAAATTC	350

Db 280 CATGCTTGCAAGAGACAAGCCTATGTC 313

```

1      RESULT 12
2      US-08-318-831-1
3      Sequence 1, Application US/08318831
4      Patent No. 5656595
5      GENERAL INFORMATION:
6      APPLICANT: Schweighoffer, Fabien
7      APPLICANT: Tocque, Bruno
8      TITLE OF INVENTION: PEPTIDES HAVING A GDP EXCHANGE FACTOR
9      TITLE OF INVENTION: ACTIVITY, NUCLEIC ACID SEQUENCES CODING FOR SAID PEPTIDES,
10     TITLE OF INVENTION: PREPARATION AND UTILIZATION
11     NUMBER OF SEQUENCES: 12
12     CORRESPONDENCE ADDRESS:
13     ADDRESSEE: Rhone-Poulenc Rorer Inc.
14     STREET: 500 Arcola Road, 3C43
15     CITY: Collegeville
16     STATE: PA
17     COUNTRY: USA
18     ZIP: 19426
19     COMPUTER READABLE FORM:
20     MEDIUM TYPE: Floppy disk
21     COMPUTER: Macintosh
22     OPERATING SYSTEM: System 7.1
23     SOFTWARE: Word 5.1 (EPO PatentIn)
24     CURRENT APPLICATION DATA:
25     APPLICATION NUMBER: US/08/318,831
26     FILING DATE: 19 October 1994
27     CLASSIFICATION: 435
28     PRIOR APPLICATION DATA:
29     APPLICATION NUMBER: FR92/04827
30     FILING DATE: 21-APR-1992
31     ATTORNEY/AGENT INFORMATION:
32     NAME: Smith, Julie K.
33     REGISTRATION NUMBER: P-38,619
34     REFERENCE/DOCKET NUMBER: ST92033-US
35     TELECOMMUNICATION INFORMATION:
36     TELEPHONE: (610) 454-3839
37     TELEFAX: (610) 454-3808
38     INFORMATION FOR SEQ ID NO: 1:
39     SEQUENCE CHARACTERISTICS:
40     LENGTH: 2652 base pairs
41     TYPE: nucleic acid
42     STRANDEDNESS: double
43     TOPOLOGY: linear
44     MOLECULE TYPE: CDNA
45     HYPOTHETICAL: NO
46     ANTI-SENSE: NO
47     FEATURE:
48     NAME/KEY: CDS
49     LOCATION: 1..2445
50     FEATURE:
51     NAME/KEY: CDS
52     LOCATION: 445..2445 (SEQ ID NO 3)
53     FEATURE:
54     NAME/KEY: CDS
55     LOCATION: 976..2445 (SEQ ID NO 4)
56     US-08-318-831-1

```

Query Match	8.7%	Score 36.6	DB 1	Length 2652
Best Local Similarity	53.1%	Pred. No. 0	041	
Matches 78	Conservative 0	Mismatches 69	Indels 0	Gaps 0

QY	105	TTTATTTCTAATATGAGCAATTGGCGGCAGAACACAAACAGCTGAGCAAGAGCCCTCCAA	164
Db	2402	TCATCAGATCTTCTCTCCGAATAAACAAAACTCCCCACCTGAAGCTGTGCCAGGCCA	2461
QY	165	GCCAAATTTATGTGTGAACTTCTACTATGTATCTCGTACCCATGAGTGATATATGGA	224
Db	2462	GACCCACGCTCTCCCGGAGACATGTGCTAGATGTACTGTACATATTCGTTGGTTTCAAC	2522
QY	225	ATGTTCTCTTTCATCATCGTGGCCATC	251

Db 2522 TGGATTTCCTCTCAGTATGCTTC 2548

## RESULT 13

US-09-016-434-1360  
 ; Sequence 1360, Application US/09016434  
 ; Patent No. 6500938  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Janice Au-Young  
 ; APPLICANT: Jeffrey J. Seilhamer  
 ; TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING  
 ; TITLE OF INVENTION: PATHWAY GENE EXPRESSION  
 ; NUMBER OF SEQUENCES: 1490  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.  
 ; STREET: 3174 PORTER DRIVE  
 ; CITY: PALO ALTO  
 ; STATE: CALIFORNIA  
 ; COUNTRY: USA  
 ; ZIP: 94304  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/09/016,434  
 ; FILING DATE: HEREMITH  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER:  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Zeller, Karen J.  
 ; REGISTRATION NUMBER: 37,071  
 ; REFERENCE/DOCKET NUMBER: PA-0002 US  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (650) 855-0555  
 ; TELEFAX: (650) 845-4166  
 ; INFORMATION FOR SEQ ID NO: 1360:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 1335 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; IMMEDIATE SOURCE:  
 ; LIBRARY: GENBANK  
 ; CLONE: 9408691  
 ; US-09-016-434-1360

Query Match 8.6%; Score 36; DB 4; Length 1335;  
 Best Local Similarity 52.7%; Pred. No. 0.044; Indels 0; Gaps 0;

Matches 78; Conservative 0; Mismatches 70; Indels 0; Gaps 0;  
 QY 165 GCCAAGTGTGAGTCTGAGACTTCTATGTCATCTGATCTGATCTGATGATGGA 224  
 Db 868 GCGAAGAGCGCTGGGGGTGACACCGACTACATCTACAGGGCCCATGATCTGCTCG 927  
 QY 225 ATGTTCTTTTCATCATCGTGGCCATCTGCTGTGAGCACTGTGAATCCAGAGACGGGAA 284  
 Db 928 CTGATCAATTTTCATCTCTCTTTTCAACATGCTCCGATCTCTCATGACCAAGCTCCGGGCA 987  
 QY 285 CACTCCATGACCCCTACACGACGATACA 312  
 Db 988 TCACCACTGCTGAGACGATTCAGTACA 1015

RESULT 14  
 US-08-110-286A-1  
 ; Sequence 1, Application US/08110286A  
 ; Patent No. 5728545

GENERAL INFORMATION:  
 ; APPLICANT: Perrin, Marilyn H.  
 ; APPLICANT: Chen, Ruoping  
 ; APPLICANT: Lewis, Kathy A.  
 ; APPLICANT: Vale Jr., Wyle W.  
 ; APPLICANT: Donaldson, Cynthia J.  
 ; TITLE OF INVENTION: CLONING AND RECOMBINANT PRODUCTION OF  
 ; NUMBER OF SEQUENCES: 6  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark  
 ; STREET: 444 South Flower Street, Suite 2000  
 ; CITY: Los Angeles  
 ; STATE: CA  
 ; COUNTRY: USA  
 ; ZIP: 90071  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/110,286A  
 ; FILING DATE:  
 ; CLASSIFICATION: 435  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 08/079,320  
 ; FILING DATE: 18-JUN-1993  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Reiter, Stephen E.  
 ; REGISTRATION NUMBER: 31,192  
 ; REFERENCE/DOCKET NUMBER: P41 9439  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 619-546-4737  
 ; TELEFAX: 619-546-9392  
 ; INFORMATION FOR SEQ ID NO: 1:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 1380 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: both  
 ; TOPOLOGY: both  
 ; MOLECULE TYPE: cDNA  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: 82..1329  
 ; OTHER INFORMATION: /product= "HUMAN PITUITARY  
 ; OTHER INFORMATION: CRF-RECEPTOR"  
 ; OTHER INFORMATION: /note= "this sequence is encoded by clone  
 ; OTHER INFORMATION: "CRF-R1"."  
 ; US-08-110-286A-1

Query Match 8.6%; Score 36; DB 1; Length 1380;  
 Best Local Similarity 52.7%; Pred. No. 0.045; Indels 0; Gaps 0;

Matches 78; Conservative 0; Mismatches 70; Indels 0; Gaps 0;  
 QY 165 GCCAAGTGTGAGTCTGAGACTTCTATGTCATCTGATCTGATCTGATGATGGA 224  
 Db 862 GCGAAGAGCGCTGGGGGTGACACCGACTACATCTACAGGGCCCATGATCTGCTCG 921  
 QY 225 ATGTTCTTTTCATCATCGTGGCCATCTGCTGTGAGCACTGTGAATCCAGAGACGGGAA 284  
 Db 922 CTGATCAATTTTCATCTCTCTTTTCAACATGCTCCGATCTCTCATGACCAAGCTCCGGGCA 981  
 QY 285 CACTCCATGACCCCTACACGACGATACA 312  
 Db 982 TCACCACTGCTGAGACGATTCAGTACA 1009

RESULT 15  
 US-08-482-746-1  
 ; Sequence 1, Application US/08482746B  
 ; Patent No. 6399315  
 ; GENERAL INFORMATION:

```
; APPLICANT: Perrin, Marilyn H.
; APPLICANT: Chen, Ruoping
; APPLICANT: Lewis, Kathy A.
; APPLICANT: Vale Jr., Wylie W.
; APPLICANT: Donaldson, Cynthia J.
; APPLICANT: Sawchenko, Paul
; TITLE OF INVENTION: Cloning and Recombinant Production of
; FILE REFERENCE: P41-90002
; CURRENT APPLICATION NUMBER: US/08/482,746B
; EARLIER FILING DATE: 1995-06-07
; EARLIER APPLICATION NUMBER: US 08/374,009
; EARLIER FILING DATE: 1995-01-17
; EARLIER APPLICATION NUMBER: US 08/353,537
; EARLIER FILING DATE: 1994-12-09
; EARLIER APPLICATION NUMBER: PCT/US94/05908
; EARLIER FILING DATE: 1994-05-25
; EARLIER APPLICATION NUMBER: US 08/110,286
; EARLIER FILING DATE: 1993-08-23
; EARLIER APPLICATION NUMBER: US 08/079,320
; EARLIER FILING DATE: 1993-06-18
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 1495
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (82)...(1326)
; OTHER INFORMATION: /product = "Human pituitary CRF-receptor"
; OTHER INFORMATION: /note = "This sequence is encoded by clone
; OTHER INFORMATION: "CRF-R1".
US-08-482-746-1
```

```
Query Match      8.6%; Score 36; DB 4; Length 1495;
Best Local Similarity 52.7%; Pred. No. 0.047;
Matches 78; Conservative 0; Mismatches 70; Indels 0; Gaps 0;
```

```
QY      165 GCCAAGTTGATGCTGAGAACTTCTATGTCATCTGATCCTGATCCTGATGATGATTTGA 224
DB      862 GGCALAAAGGCGCTGGGTGACACCGACTACATCTACAGGGCCCATGATCTGTCTG 921
QY      225 ATGTTCTCTTCATCATCGTGGCCATCTGTGAGCACTGTGAATCCAAGAGCGGAA 284
DB      922 CTATCATATTTCATCTTCTTTCAACATGTCGCGATCTCTCATGACAAAGCTCCGGCA 981
QY      285 CACTCAATGACCCCTACACACAGTACA 312
DB      982 TCCACCACGCTGAGACCATTCAGTACA 1009
```

```
Search completed: October 31, 2003, 03:33:26
Job time : 32.9427 secs
```

THIS PAGE BLANK (USPTO)



GenCore version 5.1.6  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: October 29, 2003, 10:35:01 ; Search time 17 Seconds

(without alignments)  
306.132 Million cell updates/sec

Title: US-09-550-163-2

Perfect score: 632  
Sequence: 1 MSTLSNFTQLEDFERRIF.....ESKATIHENIGAGFKMSP 123

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Database :

1: /cgn2\_6/prodata/2/1aa/5A\_COMB.pep.\*  
2: /cgn2\_6/prodata/2/1aa/5B\_COMB.pep.\*  
3: /cgn2\_6/prodata/2/1aa/5A\_COMB.pep.\*  
4: /cgn2\_6/prodata/2/1aa/5B\_COMB.pep.\*  
5: /cgn2\_6/prodata/2/1aa/PTUS\_COMB.pep.\*  
6: /cgn2\_6/prodata/2/1aa/backfill1seq.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	132.5	21.0	129	3	US-09-069-896-3
2	132.5	21.0	129	3	US-09-135-021-78
3	132.5	21.0	129	3	US-09-135-020-4
4	132.5	21.0	129	3	US-09-135-010A-4
5	132.5	21.0	129	4	US-09-444-871-4
6	132.5	21.0	129	4	US-09-597-735-4
7	132.5	21.0	129	4	US-09-444-295-4
8	132.5	21.0	129	4	US-09-471-468-3
9	132.5	21.0	129	4	US-09-597-732-4
10	132.5	21.0	129	4	US-09-679-185-2
11	132.5	21.0	129	4	US-09-597-731-4
12	132.5	21.0	132	1	US-08-118-101A-6
13	128	20.3	130	3	US-09-069-896-4
14	128	20.3	130	4	US-09-471-468-4
15	127.5	20.2	129	4	US-09-679-185-4
16	78.5	12.4	498	4	US-09-107-532A-7077
17	74	11.7	262	4	US-09-134-001C-5532
18	70	11.1	170	3	US-09-069-896-1
19	70	11.1	170	4	US-09-471-468-1
20	69	10.9	411	4	US-08-887-534A-80
21	69	10.9	411	4	US-09-527-431-80
22	66.5	10.5	72	4	US-09-107-532A-7246
23	66.5	10.5	514	4	US-09-107-532A-4334
24	66.5	10.5	563	4	US-09-134-001C-3172
25	65.5	10.4	305	4	US-09-674-529B-14
26	65.5	10.4	648	4	US-09-134-001C-5161
27	65.5	10.4	987	1	US-08-436-044-6

28	65.5	10.4	987	2	US-08-436-054-6	Sequence 6, Appl1
29	65.5	10.4	987	5	PCT-US95-08812-6	Sequence 6, Appl1
30	65.5	10.4	1276	1	US-08-222-616-24	Sequence 24, Appl1
31	65.5	10.4	1276	4	US-08-446-648-24	Sequence 24, Appl1
32	65.5	10.4	1276	5	PCT-US95-04228-24	Sequence 24, Appl1
33	65.5	10.4	1276	4	US-09-634-920-4	Sequence 4, Appl1
34	65.5	10.4	2016	4	US-09-514-907A-2	Sequence 2, Appl1
35	65	10.3	1835	4	US-09-404-650-5	Sequence 5, Appl1
36	65	10.3	2175	4	US-09-404-650-2	Sequence 2, Appl1
37	65	10.3	2188	4	US-09-404-650-4	Sequence 4, Appl1
38	64.5	10.2	970	2	US-08-673-789-7	Sequence 7, Appl1
39	64.5	10.2	973	1	US-08-162-809-10	Sequence 10, Appl1
40	64.5	10.2	976	4	US-09-302-812-4	Sequence 4, Appl1
41	64.5	10.2	976	4	US-09-511-477-4	Sequence 4, Appl1
42	64.5	10.2	976	4	US-09-511-507-4	Sequence 4, Appl1
43	64	10.1	1367	2	US-08-249-687C-2	Sequence 2, Appl1
44	64	10.1	1367	2	US-08-625-819-2	Sequence 2, Appl1
45	64	10.1	1367	3	US-08-746-559A-2	Sequence 2, Appl1

#### ALIGNMENTS

RESULT 1  
US-09-069-896-3  
; Sequence 3, Application US/09069896  
; Patent No. 6071720  
; GENERAL INFORMATION:  
; APPLICANT: Hillman, Jennifer L.  
; APPLICANT: Patterson, Chandra  
; APPLICANT: Corley, Neil C.  
; TITLE OF INVENTION: DELAYED RECTIFIER POTASSIUM  
; TITLE OF INVENTION: CHANNEL HOMOLOG  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSER: Incyte Pharmaceuticals, Inc.  
; STREET: 3174 Porter Drive  
; CITY: Palo Alto  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94304  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/069, 896  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Carione, Michael C  
; REGISTRATION NUMBER: 39,132  
; REFERENCE/DOCKET NUMBER: PF-0507 US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 650-855-0555  
; TELEFAX: 650-845-4166  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 129 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; IMMEDIATE SOURCE:  
; LIBRARY: GenBank  
; CLONE: 452497  
; US-09-069-896-3  
Query Match 21.0%; Score 132.5; DB 3; Length 129;

Best Local Similarity 45.1%; Pred. No. 1.2e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

Qy 51 LYLWMWGMSPFIIVALTIVTSVKRREHNDPYHOYIVD-WOEKXKSOI 100  
Db 45 LYLWMLVGFPGFTLIGIMLSYIRSKLEHSDNPFNVYIESDAWQEKXKAYV 95

#### RESULT 2

US-09-135-021-78  
; Sequence 78, Application US/09135021A  
; Patent No. 6150104  
; GENERAL INFORMATION:  
; APPLICANT: Keating, Mark T.  
; APPLICANT: Splanewski, Igor  
; TITLE OF INVENTION: A HOMOLOGOUS MUTATION IN KYLOT1 WHICH CAUSES JERVELL  
; TITLE OF INVENTION: AND LANGE-NIELSEN SYNDROME  
; FILE REFERENCE: 2323-128  
; CURRENT APPLICATION NUMBER: US/09/135,021A  
; CURRENT FILING DATE: 1998-08-17  
; EARLIER APPLICATION NUMBER: 08/874,655  
; EARLIER FILING DATE: 1997-06-13  
; EARLIER APPLICATION NUMBER: 60/094,477  
; EARLIER FILING DATE: 1998-07-29  
; NUMBER OF SEQ ID NOS: 80  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 78  
; LENGTH: 129  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-135-021-78

Query Match 21.0%; Score 132.5; DB 3; Length 129;  
Best Local Similarity 45.1%; Pred. No. 1.2e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

Qy 51 LYLWMWGMSPFIIVALTIVTSVKRREHNDPYHOYIVD-WOEKXKSOI 100  
Db 45 LYLWMLVGFPGFTLIGIMLSYIRSKLEHSDNPFNVYIESDAWQEKXKAYV 95

RESULT 3  
US-09-135-020-4  
; Sequence 4, Application US/09135020  
; Patent No. 6274332  
; GENERAL INFORMATION:  
; APPLICANT: Keating, Mark T.  
; APPLICANT: Sanguinetti, Michael C.  
; TITLE OF INVENTION: MUTATIONS IN THE KCNE1 GENE ENCODING HUMAN MINK WHICH  
; TITLE OF INVENTION: CAUSE ARRHYTHMIA SUSCEPTIBILITY THEREBY ESTABLISHING  
; TITLE OF INVENTION: KCNE1 AS AN IQT GENE  
; FILE REFERENCE: 2323-131  
; CURRENT APPLICATION NUMBER: US/09/135,020  
; CURRENT FILING DATE: 1998-08-17  
; EARLIER APPLICATION NUMBER: 08/921,068  
; EARLIER FILING DATE: 1997-08-29  
; EARLIER APPLICATION NUMBER: 08/739,383  
; EARLIER FILING DATE: 1996-10-29  
; EARLIER APPLICATION NUMBER: 60/019,014  
; EARLIER FILING DATE: 1995-12-22  
; EARLIER APPLICATION NUMBER: 60/094,477  
; EARLIER FILING DATE: 1998-07-29  
; NUMBER OF SEQ ID NOS: 114  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 4  
; LENGTH: 129  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-135-020-4

Query Match 21.0%; Score 132.5; DB 3; Length 129;  
Best Local Similarity 45.1%; Pred. No. 1.2e-07;

Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

Qy 51 LYLWMWGMSPFIIVALTIVTSVKRREHNDPYHOYIVD-WOEKXKSOI 100  
Db 45 LYLWMLVGFPGFTLIGIMLSYIRSKLEHSDNPFNVYIESDAWQEKXKAYV 95

#### RESULT 4

US-09-135-010A-4  
; Sequence 4, Application US/09135010A  
; Patent No. 627978  
; GENERAL INFORMATION:  
; APPLICANT: Keating, Mark T.  
; APPLICANT: Sanguinetti, Michael C.  
; APPLICANT: Curran, Mark B.  
; APPLICANT: Landes, Gregory M.  
; APPLICANT: Comore, Timothy D.  
; APPLICANT: Burn, Timothy C.  
; APPLICANT: Splanewski, Igor  
; TITLE OF INVENTION: KYLOT1 - A LONG QT SYNDROME GENE  
; FILE REFERENCE: 2323-133  
; CURRENT APPLICATION NUMBER: US/09/135,010A  
; CURRENT FILING DATE: 1998-08-17  
; PRIOR APPLICATION NUMBER: 60/094,477  
; PRIOR FILING DATE: 1998-07-29  
; PRIOR APPLICATION NUMBER: 08/921,068  
; PRIOR FILING DATE: 1997-08-29  
; PRIOR APPLICATION NUMBER: 08/739,383  
; PRIOR FILING DATE: 1996-10-29  
; PRIOR APPLICATION NUMBER: 60/019,014  
; PRIOR FILING DATE: 1995-12-22  
; NUMBER OF SEQ ID NOS: 116  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 4  
; LENGTH: 129  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-135-010A-4

Query Match 21.0%; Score 132.5; DB 3; Length 129;  
Best Local Similarity 45.1%; Pred. No. 1.2e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

Qy 51 LYLWMWGMSPFIIVALTIVTSVKRREHNDPYHOYIVD-WOEKXKSOI 100  
Db 45 LYLWMLVGFPGFTLIGIMLSYIRSKLEHSDNPFNVYIESDAWQEKXKAYV 95

RESULT 5  
US-09-444-871-4  
; Sequence 4, Application US/09444871  
; Patent No. 6323026  
; GENERAL INFORMATION:  
; APPLICANT: Keating, Mark T.  
; APPLICANT: Sanguinetti, Michael C.  
; TITLE OF INVENTION: MUTATIONS IN THE KCNE1 GENE ENCODING HUMAN MINK WHICH  
; TITLE OF INVENTION: CAUSE ARRHYTHMIA SUSCEPTIBILITY THEREBY ESTABLISHING  
; TITLE OF INVENTION: KCNE1 AS AN IQT GENE  
; FILE REFERENCE: 2323-131  
; CURRENT APPLICATION NUMBER: US/09/444,871  
; CURRENT FILING DATE: 1999-11-22  
; EARLIER APPLICATION NUMBER: US 09/135,020  
; EARLIER FILING DATE: 1998-08-17  
; EARLIER APPLICATION NUMBER: 08/921,068  
; EARLIER FILING DATE: 1997-08-29  
; EARLIER APPLICATION NUMBER: 08/739,383  
; EARLIER FILING DATE: 1996-10-29  
; EARLIER APPLICATION NUMBER: 60/019,014  
; EARLIER FILING DATE: 1995-12-22  
; EARLIER APPLICATION NUMBER: 60/094,477  
; EARLIER FILING DATE: 1998-07-29  
; NUMBER OF SEQ ID NOS: 114

SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 4  
LENGTH: 129  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-444-871-4

Query Match 21.0%; Score 132.5; DB 4; Length 129;  
Best Local Similarity 45.1%; Pred. No. 1.2e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

QY 51 LYLWMIGMFSFTIIVLVSTVSKRREHSNDPYHOYVED-WQEKYKSOI 100  
DB 45 LYLWMVIGFGFFTLGIMLSYRSKLEHSNDPFNVYIESDAWQEKDQKAYV 95

RESULT 6  
US-09-597-735-4  
Sequence 4, Application US/09597735  
Patent No. 6420124

GENERAL INFORMATION:  
APPLICANT: Keating, Mark T.  
APPLICANT: Sanguinetti, Michael C.  
APPLICANT: Curran, Mark E.  
APPLICANT: Landes, Gregory M.  
APPLICANT: Connors, Timothy D.  
APPLICANT: Burn, Timothy C.  
APPLICANT: Splawski, Igor

TITLE OF INVENTION: KYLOT1 - A LONG QT SYNDROME GENE

FILE REFERENCE: 2323-133

CURRENT APPLICATION NUMBER: US/09/597,735

EARLIER FILING DATE: 2000-06-19

EARLIER APPLICATION NUMBER: 09/135,010

EARLIER FILING DATE: 1998-08-17

EARLIER APPLICATION NUMBER: 60/094,477

EARLIER FILING DATE: 1998-07-29

EARLIER APPLICATION NUMBER: 08/921,068

EARLIER FILING DATE: 1997-08-29

EARLIER APPLICATION NUMBER: 08/739,383

EARLIER FILING DATE: 1996-10-29

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

EARLIER APPLICATION NUMBER: 60/019,014

EARLIER FILING DATE: 1995-12-22

PRIOR APPLICATION NUMBER: 09/135,020  
PRIOR FILING DATE: 1998-08-17  
PRIOR APPLICATION NUMBER: 08/921,068  
PRIOR FILING DATE: 1997-08-29  
PRIOR APPLICATION NUMBER: 08/739,383  
PRIOR FILING DATE: 1996-10-29  
PRIOR APPLICATION NUMBER: 60/019,014  
PRIOR FILING DATE: 1995-12-22  
PRIOR APPLICATION NUMBER: 60/094,477  
PRIOR FILING DATE: 1998-07-29  
NUMBER OF SEQ ID NOS: 114

SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 4  
LENGTH: 129  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-444-295-4

Query Match 21.0%; Score 132.5; DB 4; Length 129;  
Best Local Similarity 45.1%; Pred. No. 1.2e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

QY 51 LYLWMIGMFSFTIIVLVSTVSKRREHSNDPYHOYVED-WQEKYKSOI 100  
DB 45 LYLWMVIGFGFFTLGIMLSYRSKLEHSNDPFNVYIESDAWQEKDQKAYV 95

RESULT 8  
US-09-471-468-3  
Sequence 3, Application US/09471468  
Patent No. 6432687

GENERAL INFORMATION:  
APPLICANT: Hallman, Jennifer L.  
APPLICANT: Patterson, Chandra  
APPLICANT: Corley, Neil C.  
TITLE OF INVENTION: DELAYED RECTIFIER POTASSIUM  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Incyte Pharmaceuticals, Inc.  
STREET: 3174 Porter Drive  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94304

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/471,468  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/069,896  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Cerrione, Michael C.  
REGISTRATION NUMBER: 39,132  
REFERENCE/DOCKET NUMBER: PF-0507 US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-855-0555  
TELEFAX: 650-845-4166  
TELEX:  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 129 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
LIBRARY: GenBank



MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/118,101A  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Gaul, Timothy J.  
REGISTRATION NUMBER: 33,111  
REFERENCE/DOCKET NUMBER: DC27  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (609) 252-5901  
TELEFAX: (609) 252-4526  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 132 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-118-101A-6

Query Match 21.0%; Score 132.5; DB 1; Length 132;  
Best Local Similarity 45.1%; Pred. No. 1.2e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

QY 51 LYIMWIGMFSPIVAILVSTVSKRREHSNDPYHOYVED-WOEKYSOI 100  
DB 48 LYIMWIGMFSPIVAILVSTVSKRREHSNDPYHOYVED-WOEKYSOI 98

## RESULT 13

US-09-069-896-4  
Sequence 4, Application US/09069896  
Patent No. 6071720  
GENERAL INFORMATION:  
APPLICANT: Hillman, Jennifer L.  
APPLICANT: Patterson, Chandra  
TITLE OF INVENTION: CORLEY, Neil C.  
TITLE OF INVENTION: DELAYED RECTIFIER POTASSIUM  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Incyte Pharmaceuticals, Inc.  
STREET: 3174 Porter Drive  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94304  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/069,896  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Cerrone, Michael C.  
REGISTRATION NUMBER: 39,132  
REFERENCE/DOCKET NUMBER: PF-0507 US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-855-0555  
TELEFAX: 650-845-4166  
TELEX:  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 130 amino acids

TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
LIBRARY: GenBank  
CLONE: 203977  
US-09-069-896-4

Query Match 20.3%; Score 128; DB 3; Length 130;  
Best Local Similarity 41.4%; Pred. No. 3.9e-07;  
Matches 29; Conservative 17; Mismatches 20; Indels 4; Gaps 3;

QY 51 LYIMWIGMFSPIVAILVSTVSKRREHSNDPYHOYVED-WOEKYS--OIMLEESK 107  
DB 46 LYIMWIGMFSPIVAILVSTVSKRREHSNDPYHOYVED-WOEKYS--OIMLEESK 105

QY 108 AT-IHENIGA 116  
DB 106 ACYVIENQAA 115

## RESULT 14

US-09-471-468-4  
Sequence 4, Application US/09471468  
Patent No. 6432687  
GENERAL INFORMATION:  
APPLICANT: Hillman, Jennifer L.  
APPLICANT: Patterson, Chandra  
TITLE OF INVENTION: CORLEY, Neil C.  
TITLE OF INVENTION: DELAYED RECTIFIER POTASSIUM  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Incyte Pharmaceuticals, Inc.  
STREET: 3174 Porter Drive  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94304  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/471,468  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/069,896  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Cerrone, Michael C.  
REGISTRATION NUMBER: 39,132  
REFERENCE/DOCKET NUMBER: PF-0507 US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-855-0555  
TELEFAX: 650-845-4166  
TELEX:

INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 130 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
LIBRARY: GenBank  
CLONE: 203977  
US-09-471-468-4

Query Match 20.3%; Score 128; DB 4; Length 130;  
Best Local Similarity 41.4%; Pred. No. 3.9e-07;  
Matches 29; Conservative 17; Mismatches 20; Indels 4; Gaps 3;





```

; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 49007
; LENGTH: 123
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AP000120.1
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.98
; OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 0.67
; OTHER INFORMATION: EST HUMAN HIT: A1962650.1, EVALUB 3.00e-59
; OTHER INFORMATION: SWISSPROT HIT: Q9Y6J6, EVALUB 7.00e-67
US-09-864-761-49007

```

```

Query Match          100.0%; Score 632; DB 9; Length 123;
Best Local Similarity 100.0%; Pred. No. 3.4e-64;
Matches 123; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 MSTLSNTQTLEDFRIFITTMNDNFRONTTAEQALQAVDANFYVILYLMWIGMF 60
DB      1 MSTLSNTQTLEDFRIFITTMNDNFRONTTAEQALQAVDANFYVILYLMWIGMF 60
QY      61 SFTIIVALTSTVSKREHNSNDPYHOYIVEDWQEKYSQILNLEESKATIHENIGAAGFK 120
DB      61 SFTIIVALTSTVSKREHNSNDPYHOYIVEDWQEKYSQILNLEESKATIHENIGAAGFK 120
QY      121 MSP 123
DB      121 MSP 123

```

```

RESULT 2
US-10-000-151B-4
; Sequence 4, Application US/10000151B
; Publication No. US2003003136A1
; GENERAL INFORMATION:
; APPLICANT: Balser, Jeffrey R.
; APPLICANT: George, Alfred L.
; TITLE OF INVENTION: HUMAN KCR1 REGULATION OF HERG POTASSIUM CHANNEL BLOCK
; FILE REFERENCE: Vanderbilt Ref No. US2003003136A1 VU0120; Attorney Docket No. US2003
; CURRENT APPLICATION NUMBER: US/10/000,151B
; CURRENT FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 123
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-000-151B-4

```

```

Query Match          100.0%; Score 632; DB 15; Length 123;
Best Local Similarity 100.0%; Pred. No. 3.4e-64;
Matches 123; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 MSTLSNTQTLEDFRIFITTMNDNFRONTTAEQALQAVDANFYVILYLMWIGMF 60
DB      1 MSTLSNTQTLEDFRIFITTMNDNFRONTTAEQALQAVDANFYVILYLMWIGMF 60
QY      61 SFTIIVALTSTVSKREHNSNDPYHOYIVEDWQEKYSQILNLEESKATIHENIGAAGFK 120
DB      61 SFTIIVALTSTVSKREHNSNDPYHOYIVEDWQEKYSQILNLEESKATIHENIGAAGFK 120

```

```

QY      121 MSP 123
DB      121 MSP 123

```

```

RESULT 3
US-09-864-761-36713
; Sequence 36713, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; FILE REFERENCE: Aecm1ca-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 36713
; LENGTH: 103
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AP000052.1
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.1
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.3
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.92
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.4
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.1
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.2
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.94

```



OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.88  
OTHER INFORMATION: SWISSPROT HIT: Q9Y6J6, EVALUE 2.00e-55  
OTHER INFORMATION: EST\_HUMAN HIT: A1962650.1, EVALUE 1.00e-54  
US-09-864-761-36713

Query Match 84.3%; Score 533; DB 9; Length 103;  
Best Local Similarity 100.0%; Pred. No. 4,9e-53;  
Matches 103; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 19 FIVYMNQNTAEBALQAKVDANFYVYLLVWMTGMSFIIIVLVTSKRR 78  
DB 1 FIVYMNQNTAEBALQAKVDANFYVYLLVWMTGMSFIIIVLVTSKRR 60

QY 79 HSNDPYHOYIVEDMOEKYSQIINLESKATIHENIGAAGFKM 121  
DB 61 HSNDPYHOYIVEDMOEKYSQIINLESKATIHENIGAAGFKM 103

RESULT 4  
US-09-864-761-37234  
Sequence 37234, Application US/09864761  
Patent No. US20020048763A1

GENERAL INFORMATION:  
APPLICANT: Penn, Sharon G.  
APPLICANT: Rank, David R.  
APPLICANT: Hanzel, David K.  
APPLICANT: Chen, Wensheng  
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
FILE REFERENCE: Aecomica-X-1  
CURRENT APPLICATION NUMBER: US/09/864,761

PRIOR FILING DATE: 2001-05-23  
PRIOR APPLICATION NUMBER: US 60/180,312  
PRIOR FILING DATE: 2000-02-04  
PRIOR APPLICATION NUMBER: US 60/207,456  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: US 09/632,366  
PRIOR FILING DATE: 2000-08-03  
PRIOR APPLICATION NUMBER: GB 24263.6  
PRIOR FILING DATE: 2000-10-04  
PRIOR APPLICATION NUMBER: US 60/236,359  
PRIOR FILING DATE: 2000-09-27  
PRIOR APPLICATION NUMBER: PCT/US01/00666  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00667  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00664  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00669  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00665  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00668  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00663  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00662  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00661  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00670  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: US 60/234,687  
PRIOR FILING DATE: 2000-09-21  
PRIOR APPLICATION NUMBER: US 09/608,408  
PRIOR FILING DATE: 2000-06-30  
PRIOR APPLICATION NUMBER: US 09/774,203  
PRIOR FILING DATE: 2001-01-29  
NUMBER OF SEQ ID NOS: 49117  
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1  
SEQ ID NO 37234  
LENGTH: 76  
TYPE: PRT

ORGANISM: Homo sapiens

FEATURE:

OTHER INFORMATION: MAP TO AP000121.1  
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.1  
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.94  
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.59  
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.74  
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.66  
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.66  
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.7  
OTHER INFORMATION: EST\_HUMAN HIT: A1246239.1, EVALUE 2.00e-07  
OTHER INFORMATION: SWISSPROT HIT: P15382, EVALUE 1.00e-39  
US-09-864-761-37234

Query Match 21.0%; Score 132.5; DB 9; Length 76;  
Best Local Similarity 45.1%; Pred. No. 1.2e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

QY 51 LYLVMTGMSFIIIVLVTSVSKRRRHSNDPYHOYIVED-MOEKYSQI 100  
DB 9 LYLVMTGMSFIIIVLVTSVSKRRRHSNDPYHOYIVED-MOEKYSQI 59

RESULT 5  
US-10-224-683-3  
Sequence 3, Application US/10224683  
Publication No. US20030162192A1

GENERAL INFORMATION:  
APPLICANT: Sotos, John  
APPLICANT: Riehoff, Jr., Hugh  
APPLICANT: Guida, Marco  
APPLICANT: Curran, Mark  
TITLE OF INVENTION: Polymorphisms Associated with Ion-Channel Disease  
FILE REFERENCE: 4389-33  
CURRENT APPLICATION NUMBER: US/10/224,683  
CURRENT FILING DATE: 2002-01-06  
PRIOR APPLICATION NUMBER: 60/314,331  
PRIOR FILING DATE: 2001-08-20  
PRIOR APPLICATION NUMBER: 60/378,521  
PRIOR FILING DATE: 2002-05-06  
NUMBER OF SEQ ID NOS: 185  
SOFTWARE: PatentIn version 3.1

SEQ ID NO 3  
LENGTH: 129  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-224-683-3

Query Match 21.0%; Score 132.5; DB 12; Length 129;  
Best Local Similarity 45.1%; Pred. No. 2.4e-07;  
Matches 23; Conservative 15; Mismatches 12; Indels 1; Gaps 1;

QY 51 LYLVMTGMSFIIIVLVTSVSKRRRHSNDPYHOYIVED-MOEKYSQI 100  
DB 45 LYLVMTGMSFIIIVLVTSVSKRRRHSNDPYHOYIVED-MOEKYSQI 95

RESULT 6  
US-10-368-643-4  
Sequence 4, Application US/10368643  
Publication No. US20030170708A1  
GENERAL INFORMATION:  
APPLICANT: Keating, Mark T.  
APPLICANT: Sanguinetti, Michael C.  
APPLICANT: Curran, Mark E.  
APPLICANT: Landes, Gregory M.  
APPLICANT: Connors, Timothy D.  
APPLICANT: Burn, Timothy C.  
APPLICANT: Splawski, Igor  
TITLE OF INVENTION: KvLQT1 - A LONG QT SYNDROME GENE  
FILE REFERENCE: 2323-163  
CURRENT APPLICATION NUMBER: US/10/368,643  
CURRENT FILING DATE: 2003-02-20



```

; FILING DATE: <Unknown>
; APPLICATION NUMBER: 09/069,896
; FILING DATE: <Unknown>

```

```

; ATTORNEY/AGENT INFORMATION:
; NAME: Cerrone, Michael C
; REGISTRATION NUMBER: 39,132
; REFERENCE/DOCKET NUMBER: PF-0507 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-855-0555
; TELEFAX: 650-845-4166
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 170 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: BRSTNOT03
; CLONE: 637471
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-209-534-1

Query Match      11.1%; Score 70; DB 15; Length 170;
Best Local Similarity 26.8%; Pred. No. 4.4;
Matches 22; Conservative 16; Mismatches 34; Indels 10; Gaps 3;

QY 23 MDNWRONTAEQALQAKDA-----ENFYVILYLMWMIGMFSFIIVLVSTVSKRR 77
   ::::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
DB 7 LNSTHPTTASSPLESPLRAGGSGNGNEFYFILVWSFYGIF---LIGIMLGYSKRR 63
   ::::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|

QY 78 EHSNDPYHOYIVED--WQEKYK 97
   |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
DB 64 EKKSLLLYKDERLGEAMK 85
   |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|

RESULT 13
US-09-815-242-5723
; Sequence 5723, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: PaetSeq for Windows Version 4.0
; SEQ ID NO 5723
; LENGTH: 523
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-815-242-5723
```

```

Query Match      11.1%; Score 70; DB 9; Length 523;
Best Local Similarity 27.9%; Pred. No. 18;
Matches 29; Conservative 14; Mismatches 33; Indels 28; Gaps 5;

QY 35 EALQAKVDENFYVILYLMWMIGMFSFIIVLVSTVSKRREHNDPYHOYIVED-WQ 93
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
DB 44 EALBALVEAE-----GRPDFIYIQAIPSETITNLQIMSERYNTYVDSFWS 90
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|

QY 94 -----EKYKSQIL---NLEE--SKATIHENIGAGFKMSP 123
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
DB 91 VEYEDENVQKTVVQPLHYRNIEERNKLEAVSFGQYGDYKSP 134
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|

RESULT 14
US-09-815-242-12651
; Sequence 12651, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: PaetSeq for Windows Version 4.0
; SEQ ID NO 12651
; LENGTH: 525
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-815-242-12651

Query Match      11.1%; Score 70; DB 9; Length 525;
Best Local Similarity 27.9%; Pred. No. 18;
Matches 29; Conservative 14; Mismatches 33; Indels 28; Gaps 5;

QY 35 EALQAKVDENFYVILYLMWMIGMFSFIIVLVSTVSKRREHNDPYHOYIVED-WQ 93
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
DB 46 EALBALVEAE-----GRPDFIYIQAIPSETITNLQIMSERYNTYVDSFWS 92
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|

QY 94 -----EKYKSQIL---NLEE--SKATIHENIGAGFKMSP 123
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
DB 93 VEYEDENVQKTVVQPLHYRNIEERNKLEAVSFGQYGDYKSP 136
   ||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|

RESULT 15
US-10-301-997-80
; Sequence 80, Application US/10301997
; Publication No. US20030148346A1
; GENERAL INFORMATION:
; APPLICANT: Holden, David W.
; TITLE OF INVENTION: ANTI-BACTERIAL METHODS AND MATERIALS
```

Fri Oct 31 14:53:04 2003

**us-09-550-163-2.rapb**

**Page 7**

NUMBER OF SEQUENCES: 106  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Garstein, Murray & Borum  
STREET: 233 South Wacker Drive/6300 Sears Tower  
CITY: Chicago  
STATE: Illinois  
COUNTRY: United States of America  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/301,997  
FILING DATE: 22-NO. US2003014836A1-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/527,431  
FILING DATE: <Unknown>  
APPLICATION NUMBER: US/08/887,534  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Rin-Laures, Li-Hsien  
REGISTRATION NUMBER: 33,547  
REFERENCE/DOCKET NUMBER: 28341/33996  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 474-6300  
TELEFAX: (312) 474-0448  
TELEX: (312) 474-6600  
INFORMATION FOR SEQ ID NO: 80:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 411 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 80:  
US-10-301-997-80

```
Query Match      10.9%; Score 69; DB 12; Length 411;
Best Local Similarity 27.9%; Pred. No. 18;
Matches 17; Conservative 12; Mismatches 24; Indels 8; Gaps 1
```

Oy      60 FSIIVALTSTVSKRREHS-----NDYHQIYVEDWQEKYSQTILNEESKATIH 111  
|||:::|||||:::|||::|::|::|::|:  
Db      348 FSFVIITLMMVSFYKDANQERKFGLTLPNKHRLQEIYIKSQGDYEDSIDLEKRQRNRILE 407  
  
Oy      112 E 112  
Db      408 K 408

Search completed: October 29, 2003, 10:52:13  
Job time : 29 secs

**THIS PAGE BLANK (USPTO)**